

# FIRST 5 KERN ANNUAL REPORT

## FISCAL YEAR 2014-2015



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# Acknowledgements

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Following the judicial expectation to “use outcome-based accountability” (Proposition 10, p. 4), data tracking was assisted by key stakeholders of the community. I thank the following professionals and organizations for their leadership and support:

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- Past Commissioners Pat Cheadle, Emily Duran, and Mick Gleason.
- First 5 Kern Technical Advisory Committee (TAC).
- First 5 Kern Commission staff:
  - Roland Maier, Executive Director
  - Kathy Ives, Chief Finance Officer
  - Sharon Powell, Administrative Assistant
  - Anastasia Lester, Program Officer
  - Paula De La Riva-Barrera, Program Officer
  - Wilknica Jefferson, Program Officer
  - Theresa Ortiz, Senior Research Analyst
  - Diana Navarro, Research Associate
  - Crystal Gardner, Finance Specialist
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  - Jan St Pierre, Communications Officer.
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- Institutional Review Board of California State University, Bakersfield, led by Drs. Paul Newberry, Roseanna McCleary, Isabel Sumaya, and Steve Suter.

Alternate commission members are listed in Exhibit 1 and TAC members are recognized in Appendix B. While appreciating the indispensable support, I conducted the data analyses and shall be fully responsible for any inaccuracies in this report.

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## Executive Summary

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Proposition 10, a ballot initiative endorsed by California voters in 1998, represents an unprecedented public investment in early childhood health and development. According to the act, a 50 cent-per-pack tax is assessed on cigarette and other tobacco products, and 80% of the state fund is administered by First 5 county commissions. On December 15, 1998, the Kern County Board of Supervisors enacted Ordinance G-6565 to establish the Kern County Children and Families Trust Fund in accordance with Proposition 10. Since then, Kern County Children and Families Commission (First 5 Kern) has administered more than \$160 million to support early childhood service programs in three focus areas, *Child Health*, *Family Functioning*, and *Child Development*. In addition, the fourth focus area is *Systems of Care* to better integrate services countywide. To justify return of the state investment, this report is produced to evaluate the annual impact of the program funding and provide recommendations for service improvement.

### Latest Developments

In Fiscal Year (FY) 2014-15, First 5 Kern allocated more than \$10 million to support 39 programs in Kern County. The state funding required assessment of service outcomes using a Results-Based Accountability (RBA) model. In support of the program evaluation, two important developments occurred across the state to demand more attention on justification of service outcomes:

- Assembly bills on tobacco tax increase

California has not increased tobacco tax since the passage of Proposition 10 in 1998, which ranked the state tobacco tax rate 33<sup>rd</sup> across the nation. New assembly bills have been introduced this year to add a \$2-per-pack tax on cigarettes or other tobacco products<sup>1</sup>. In the past, a “backfill” provision was included in similar bills to ensure no negative impact on the existing programs. In particular, around 4% of Proposition 10 revenue was switched in 2015 to backfill breast cancer research from a previous assembly bill<sup>2</sup>. As tobacco consumption declines, it is pivotal to keep the backfill provision for Proposition 10 funding. To confirm this need, county commissions are expected to demonstrate program quality in early childhood services.

- State commitment on quality improvement

The State Commission asserted that “Access to programs of insufficient quality does not produce positive outcomes for children and may actually worsen early disparities in development” (First 5 California, 2015a, p. 7). To reduce the disparities, First 5 Association of California (First 5 AC) partnered with county commissions to foster service collaboration<sup>3</sup>. In 2015, First 5 Kern decided to transfer its data management system from the Grant Evaluation and Management Solution (GEMS) system to the Persimmony Data Solutions (PDS) system. Because PDS has been employed by the majority of First 5 county commissions, this decision is likely to support the collaborative effort across the

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<sup>1</sup> For example, Senate Bill 591 (<http://www.savelivescalifornia.com/ledg.pdf>) and Senate Bill 14 ([http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201520162SB14](http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520162SB14))

<sup>2</sup> [http://www.leginfo.ca.gov/pub/15-16/bill/sen/sb\\_0551-0600/sb\\_591\\_cfa\\_20150511\\_101533\\_sen\\_comm.html](http://www.leginfo.ca.gov/pub/15-16/bill/sen/sb_0551-0600/sb_591_cfa_20150511_101533_sen_comm.html)

<sup>3</sup> <http://first5association.org/aboutus/>

state and facilitate information exchange and/or result comparison among county commissions.

In summary, First 5 Kern funded local programs in *Child Health*, *Family Functioning*, and *Child Development* to serve pregnant women and young children up to five years of age. The Commission also collaborated with service providers to support *Systems of Care* in Kern County. To sustain the ongoing capacity building, this report is designed to address both *service accountability* and *program improvement* according to First 5 Kern's (2015a) Strategic Plan.

### Overview of Evaluation Activities

In FY 2014-15, First 5 Kern maintained a protocol with the Institutional Review Board (IRB) of California State University, Bakersfield. Quarterly reports were submitted for IRB review to monitor potential adverse effects in data collection and ensure its compliance with federal, state, and county rules and regulations. In addition, a template from the State Commission was employed to describe (1) overview of annual activities at the county level, (2) summary of data collections at the program level, (3) comparable results across similar programs, (4) unique findings from special services, and (5) policy impact from the evaluation effort. These components were aggregated to support program highlights in each focus area for state reporting.

Throughout the entire year, service counts at the program level were tracked within GEMS. Special programs with additional sponsorships from other agencies, such as Differential Response (DR), submitted their service and outcome data directly to First 5 Kern. In preparation for the new funding cycle, evaluation instruments were updated in English and translated into Spanish. Confidentiality trainings were offered in a webinar format to expand online accessibility across the county. First 5 Kern also provided Ages & Stages Developmental Screening (Third Edition) training to sustain data collection at the program level.

Comparisons of program findings are facilitated across multiple service providers by adoption of common instruments, such as Adult-Adolescent Parenting Inventory-2 (AAPI-2), Ages and Stages Questionnaire-3 (ASQ-3), Child Assessment-Summer Bridge (CASB), Core Data Elements (CDE) Survey, Desired Results Developmental Profile–Infant/Toddler (DRDP-IT), Desired Results Developmental Profile–Preschool (DRDP-PS), Family Stability Rubric (FSR), and Nurturing Skills Competency Scale (NSCS).

A secured data portal has been established on a Blackboard platform to share and archive internal data for evaluation reporting. An external data license was retained to extract child health data from the Office of Statewide Health Planning and Development (OSHPD). Census Bureau data were incorporated to describe community features in Kern County. Service counts and outcome assessments were incorporated to evaluate the scope and quality of service delivery. The process of data gathering was protected by an IRB protocol to comply with federal, state, and county regulations. Multiple data collection methods have been incorporated in the result tracking to triangulate evaluation findings for improvement of child and family well-being in Kern County.

Evaluation findings were presented at conferences of professional organizations and meetings, including Taft City School District Board Meeting (June 24, 2015), the annual meeting of American Educational Research Association in Chicago (April 17, 2015), and the 142<sup>nd</sup> annual meeting of American Public Health Association (APHA) in New Orleans (November 17, 2014). Another proposal was accepted within FY 2014-15 for presentation at the 143<sup>rd</sup> annual meeting of APHA in Chicago. Two new articles were reviewed for publication in a nationally-refereed journal, *Ambulatory Surgery*. In combination, First 5 Kern followed Proposition 10 stipulation to disseminate evaluation findings “to members of the general public and to professionals for the purpose of developing appropriate awareness and knowledge” (p. 7).

### Highlights of Evaluation Findings

First 5 Kern's (2015a) Strategic Plan “requires the collection and analysis of data and a report of findings in order to evaluate the effectiveness of funded programs” (p. 16). More specifically, the state commission mandates three components for annual reporting: (1) Most Recent Compelling Service Outcome, (2) Benchmark/Baseline Data, and (3) Outcome Measurement Tool (First 5 California, 2015b). Following the state and local guidelines, evaluation findings are recapped below to summarize compelling service outcomes in each focus area.

#### Program Highlights

In FY 2014-15, First 5 Kern identified three programs to illustrate exemplary services in its annual report to the state. In *Improved Child Health*, Black Infant Health (BIH) was highlighted for serving African-American women during and after pregnancies. Since last year, BIH case-managed 100 women across four supervisory districts of Kern County. Its group intervention service, including substance abuse education, was offered to 100 participants for smoke cessation and against fetal alcohol abuse. Ninety-five children were monitored for completion of all required immunizations. Forty-nine children received developmental assessments. As a result, BIH raised the rate of timely prenatal care from 66% to 85%, reduced the proportion of children with low birth weight from 22% to 18%, increased the breastfeeding rate from 47% to 54%, and lowered the percent of children with no annual health checkup from 77% to 50%. Age-specific screening showed performance of 46 infants significantly above the corresponding thresholds in *Communication*, *Gross Motor*, *Fine Motor*, *Problem Solving*, and *Personal-Social* domains.

In *Improved Family Functioning*, Greenfield School Readiness program delivered family support services through case management, parent education, health screenings and referrals. In FY 2014-15, compelling outcomes were demonstrated by significant improvement of parenting knowledge and skills among 49 parents/guardians. The corresponding effect sizes were 1.44 and 1.01, indicating strong practical impact according to Cohen's (1988) 0.8 criterion. In addition, the improved family functioning was reflected by the level of child development significantly above the age-specific thresholds in *Communication*, *Gross Motor*, *Fine Motor*, *Problem Solving*, and *Personal-Social* domains. Its Summer Bridge program also showed significant enhancement of cognitive skills for preschool children to support kindergarten transition.

In *Improved Child Development*, Wind in the Willows (WIW) Preschool offered education services near the county border. In FY 2014-15, WIW organized center-based

activities for 41 children. Through implementation of an age-appropriate curriculum, preschoolers demonstrated significant improvements in six domains, (1) *Self and Social Development*, (2) *Language and Literacy Development*, (3) *Cognitive Development*, (4) *Mathematical Development*, (5) *Physical Development*, and (6) *Health*. A strong practical impact was confirmed by large effect sizes from the program assessment.

### Aggregation of Compelling Outcomes

Besides the program-specific findings, First 5 Kern coordinates service deliveries according to its Strategic Plan. Therefore, compelling evidences are aggregated from common assessments to summarize the evaluation findings across multiple programs:

- Five programs used AAPI-2 data to assess the impact of court-mandated, parent education classes. The results showed significant improvement of parental empathy among 156 participants.
- Seven programs collected NSCS data from 207 parents. Significant improvement of nurturing-parenting knowledge was found under a pretest and posttest setting.
- Twenty programs employed ASQ-3 to show development of 1,708 children significantly above the corresponding age-specific thresholds in *Communication*, *Gross Motor*, *Fine Motor*, *Problem Solving*, and *Personal-Social* domains.
- According to CASB results, 12 Summer Bridge programs demonstrated significant improvement of cognitive skills among 417 preschoolers.
- Three programs tracked DRDP-IT data from 16 infants/toddlers. The results indicated significant enhancement of self and social development (SSD), language and literacy development (LLD), cognitive development (CD), and motor and perceptual development (MPD).
- Five programs gathered DRDP-PS data from 52 children. Significant cognitive development was found from the program assessment.

Additional indicators were gathered to evaluate separate outcomes in each focus area. In *Child Development*, Ready-to-Start (R2S) gathered Summer Bridge assessment data using a locally-designed instrument. The results indicated significant improvement of reading, mathematics, and supportive skills among 550 preschoolers. Women's Shelter Network (WSN) tracked Ages and Stages Questionnaire-Social Emotional (ASQ-SE) outcomes to screen emotional difficulties of children. Last year, the ASQ-SE scale showed five children at an average of 12<sup>th</sup> point above the *at-risk threshold* (ART) in 36<sup>th</sup> month. This year, the performance gap was reduced to 0.17 above ART in 48<sup>th</sup> month.

In *Family Functioning*, Differential Response (DR) collected data from 611 families using the North Carolina Family Assessment Scale for General Services (NCFAS-G). The results illustrated significant improvements in family environment, parental capabilities, family interactions, family safety, child well-being, social/community life, self-sufficiency, and family health.



In *Child Health, Be Choosy, Be Healthy* (BCBH) data were collected from 108 parents in a parent education program at the Bakersfield Adult School-Healthy Literacy Program (HLP). In addition to demonstrating improvement of health literacy at the parent level, HLP incorporated a new version of DRDP-PS (2015) to illustrate significant enhancement of self-regulation (SR), social and emotional development (SED), language and literacy development (LLD), cognitive development (CD), physical development–health (PD-HLTH), history-social science (HSS), and visual and performing arts (VPA) among 53 children. Meanwhile, Richardson Special Needs Collaborative (RSNC) collected Eyberg Child Behavior Inventory (ECBI) data from 45 parents and Sutter-Eyberg data from 46 teachers. The results showed significant reduction of child behavior problems through mental health interventions.

### Progress Between Adjacent Years

In comparison to last year, the positive impact is revealed on 12 fronts across multiple programs this year:

- More expectant mothers received *timely prenatal care* in the first trimester in 15 programs;
- The rate of *monthly prenatal care* increased among expectant mothers across 13 programs;
- An increase in the percent of *full-term pregnancy* occurred in 17 programs;
- The proportion of children with *low birth weight* dropped among 17 programs;
- More mothers provided *breastfeeding*, and the improvement was demonstrated across 18 programs;
- More parents maintained *two or more reading activities* with their children each week in 11 programs;
- More children *attended preschool events* in 14 programs;
- The proportion of children who *never had a dental visit* dropped from 35.41% to 27.29% across 17 programs;
- The percent of children who *did not have an annual health checkup* decreased from 10.25% to 5.65% among 20 programs;
- Nine programs demonstrated an increase in the percent of children with *all immunizations* recommended by a doctor;
- The percent of mothers *smoking during pregnancy* dropped from 16.70% to 8.60% across 10 programs;
- The rate of *smoke exposure at home* declined from 9.56% to 5.78% in 18 programs.



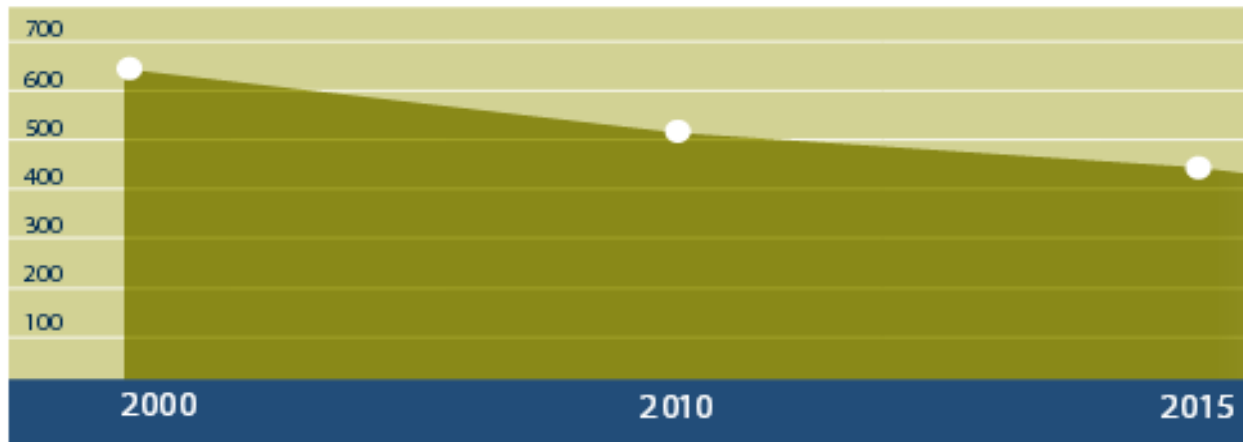
In conclusion, data collection efforts in Kern County were guided by the Statewide Evaluation Framework to triangulate information from three aspects: (1) descriptive data to highlight best practices in each focus area, (2) assessment data to assess program impacts across service providers, and (3) trend data to sustain ongoing progresses on the time dimension (First 5 California, 2005).

It was stipulated in Proposition 10 that the state commission allocate a portion of its budget to work with county commissions for “assessment and quality evaluation” (p. 5). At the county level, it was indicated in the local Strategic Plan that “The evaluation process provides ongoing assessment and feedback on program results. It allows the identification of outcomes in order to build a ‘road map’ for program development” (First 5 Kern, 2015b, p. 8). Accordingly, result triangulations in this report not only support local needs for program enhancement, but also conform to the evaluation commitment from Proposition 10.

## Chapter 1: First 5 Kern Overview

Over the past 15 years, tobacco consumption declined substantially in California. Consequently, Proposition 10 revenue from tobacco tax dropped more than 30% since 2000 (Figure 1). The falling trend inevitably imposed a challenge for First 5 Kern to sustain local services. To maintain stability of program funding, the commission reduced \$1,096,697 of its reserve in FY 2014-15 to amend the discrepancy of state investment<sup>4</sup>.

**Figure 1: Decline of Proposition 10 Revenue (in \$ million) Between 2000-2015<sup>5</sup>**



**Figure 2: Proposition 10 Investment in 2010-2015 Funding Cycle**

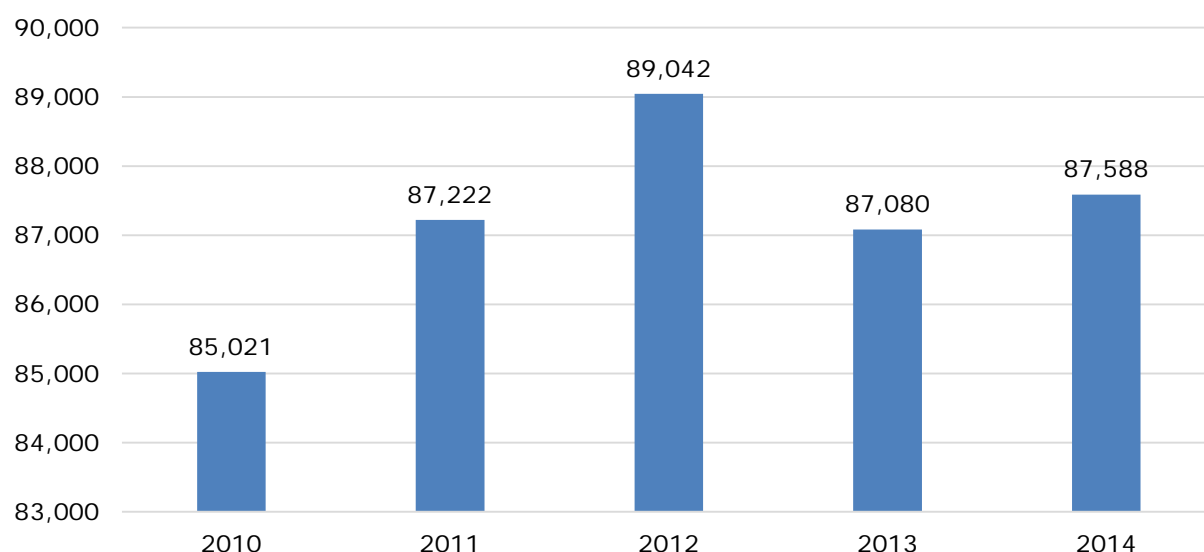


<sup>4</sup> The 2015 Audit Report of First 5 Kern.

<sup>5</sup> [https://gallery.mailchimp.com/0074f175d0b4802404b066420/files/2015\\_Investing\\_in\\_California\\_s\\_Children\\_Full\\_color\\_FINAL\\_081815\\_3\\_.pdf](https://gallery.mailchimp.com/0074f175d0b4802404b066420/files/2015_Investing_in_California_s_Children_Full_color_FINAL_081815_3_.pdf)

Figure 2 showed a pattern of First 5 Kern funding over the past five years. An investment fluctuation occurred in 2011 to purchase service equipment for Children's Mobile Immunization Program (CMIP). While Proposition 10 revenue is distributed according to the proportion of live births in each county, the local populations are not evenly spread out and extra support is needed to deliver mobile services in remote communities. Because "Health, developmental, and mental health services are more likely to be located in urban areas than in rural areas" (Smith et al., 2009, p. 6), the one-time CMIP spending has been found essential for service outreach (Wang, 2013). Beyond the transportation consideration on the space dimension, that investment was also made promptly to prepare for 2012, the year with more population demand in Kern County (Figure 3).

**Figure 3: Change of Kern County Child Population Under Age 6**

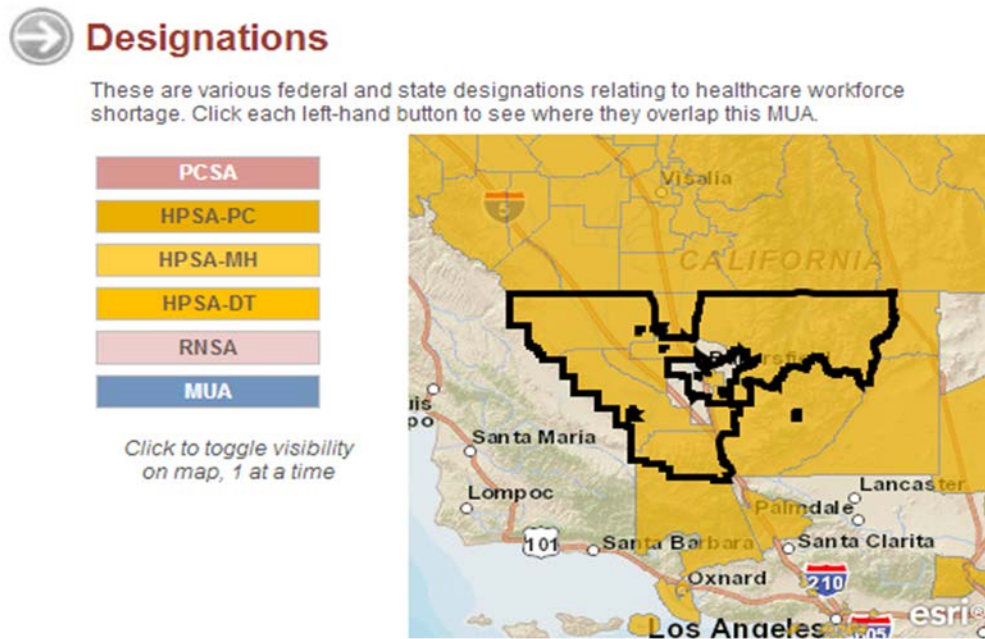


Source: Data from the Census Bureau (Form S0901).

Since 2012, local drought was accompanied by plunging oil prices to cause an increase of unemployment rate in Kern County (Hsu, 2015). Agriculture and oil industries are two primary sectors of the local economy. Because most children depend on working parents for family support, the unemployment threat could have resulted in family relocations, as reflected by a change of young child population in Figure 3.

Farming communities are typically located in rural areas where healthcare support is limited. As outlined by a dark-line frame in Figure 4, most communities in Kern County belong to Medically Underserved Areas (MUA)<sup>6</sup>. Mojave Desert is excluded from MUA for its sparse population density (see the southeast part of Figure 4). Still, service needs are evident in that area for lacking professional services. As shown in the yellow-colored section of Figure 4, nearly the entire county, including the Mojave Desert, is categorized as Health Professional Shortage Areas for Primary Care (HPSA-PC). Through delivering countywide services, First 5 Kern has exercised due diligence to offer local programs in a traditionally underserved region as large as the state of New Jersey.

<sup>6</sup> <http://gis.oshpd.ca.gov/atlas/topics/shortage/mua/kern-service-area>

**Figure 4: MUA and HPSA-PC Distribution in Kern County**

Despite the decline of Proposition 10 revenue, First 5 Kern funded 11 countywide programs in *Child Health* to overcome the shortage of professional services in Kern County (Table 1). Because these programs involved well-trained professionals, it has taken approximate \$4 million for capacity building.

**TABLE 1: COUNTYWIDE PROGRAM FUNDING IN CHILD HEALTH**

Program	Funding
Bakersfield Adult School-Health Literacy Program	\$ 125,982
Children's Mobile Immunization Program	\$ 483,418
Community Healthy Initiative of Kern County	\$ 161,663
Kern County Children's Dental Health Network	\$1,307,211
Make a Splash	\$ 52,257
Medically Vulnerable Care Coordination Project	\$ 51,116
Medically Vulnerable Infant Program	\$ 294,002
Nurse Family Partnership Program	\$ 751,172
Richardson Special Needs Collaborative	\$ 274,679
Special Start for Exceptional Children	\$ 115,372
Successful Application Stipend	\$ 335,150

In addition, more than \$2 million were distributed to nine programs this year to broaden child and family services across Kern County (Table 2).

**TABLE 2: COUNTYWIDE PROGRAM FUNDING IN CHILD/FAMILY SERVICES**

<b>Program</b>	<b>Funding</b>
2-1-1 Kern County	\$109,092
Blanton Child Development Services	\$158,950
Differential Response	\$659,211
Discovery Depot Child Care Center	\$142,472
Domestic Violence Reduction Project	\$291,956
Guardianship Caregiver Project	\$274,452
Ready to Start	\$ 97,000
Small Steps Child Development Center	\$285,197
Women's Shelter Network	\$103,499

The extensive support was guided by professional leadership at the commission level. In particular, Supervisors Mick Gleason and Zack Scrivner served as commissioners of First 5 Kern during different periods of this funding cycle. The commission composition followed the statute of Proposition 10. According to the California Health and Safety Code (Section 130140), "The county commission shall be appointed by the board of supervisors and shall consist of at least five but not more than nine members"<sup>7</sup>. In FY 2014-15, First 5 Kern Commission had a total of nine commissioners and four alternate members to represent key stakeholders, including elected officials, service providers, program administrators, community volunteers, and First 5 Kern advocates (Exhibit 1).

**Exhibit 1: First 5 Kern Commission Members**

<b>Commissioner</b>	<b>Affiliation</b>
Larry J. Rhoades (Chair)	Retired Kern County Administrator
Al Sandrini (Vice Chair)	Retired School District Superintendent
Emily Duran* (Treasurer)	Director, Provider Relations of Kern Health Systems
Dena Murphy (Secretary)	Director, Kern County Department Human Services
Sam Aunai	Dean of Instruction, Porterville College
Mick Gleason*, 1 <sup>st</sup> District	Supervisor, Kern County Board of Supervisors
Claudia Jonah	Health Officer, County of Kern Public Health Services Department
Rick Robles	Superintendent, Lamont School District
Zack Scrivner*, 2 <sup>nd</sup> District	Supervisor, Kern County Board of Supervisors
William Walker	Director, Department of Mental Health
Cindy Wasson	Retired Kern County Nurse Director and Community Advocate
<b>Alternate Members</b>	
Deanna Cloud*	Administrator, Kern County Children's System of Care
Michelle Curioso	Director of Nursing, Kern County Public Health Services
Mike Maggard, 3 <sup>rd</sup> District	Supervisor, Kern County Board of Supervisors
Antanette Reed*	Assistant Director, Child Protective Services of Kern County

\*Served part of the fiscal year.

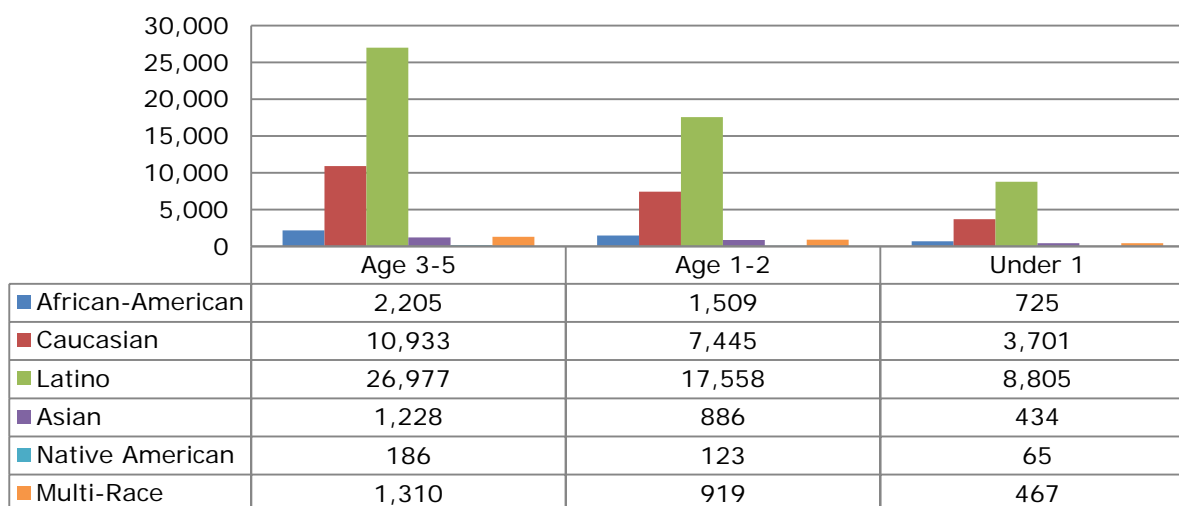
<sup>7</sup> <http://wwwstatic.kern.org/gems/first5kern/ccfcact.pdf>

The shared governance is supported by services of commissioners in six committees, Technical Advisory Committee (TAC), Executive Committee (EC), Personnel Committee (PC), Budget and Finance Committee (BFC), Community Outreach and Communications Committee (COCC), and Project Review Committee (PRC). While EC, PC, BFC, COCC, and PRC played an important role in daily commission operations, TAC worked on the future planning to address key questions of program sustainability, such as (1) Does the community know and appreciate First 5 Kern's work? (2) What should be done to assess the local, state, and national landscape over the next five years? (3) What is the likelihood of sustainability? (4) Where do the commission and service providers need to be in each year in order to prepare for future changes beyond 2020? To document return on state investment, viable approaches were discussed among local stakeholders at TAC meetings. TAC members are recognized in Appendix B. Members of the other committees are posted in the regular agenda of each commission meeting.

## Profile of Kern County Children

According to the U.S. Census Bureau<sup>8</sup>, Kern County had 87,588 children under age 6 in FY 2014-15 (see Figure 2). It was also indicated in a report that "Kern County's child population exceeded 251,000 – the 4<sup>th</sup> largest child population percentage among California counties" [Kern County Network for Children (KCNC), 2015, p. ii]. Because "1 out of every 3 Kern County children were young children under the age of 6 years old" (KCNC, 2015, p. ii), the population composition suggested a strong need for early childhood support.

**Figure 5: Ethnicity Distribution of Kern County Children Ages 0-5**



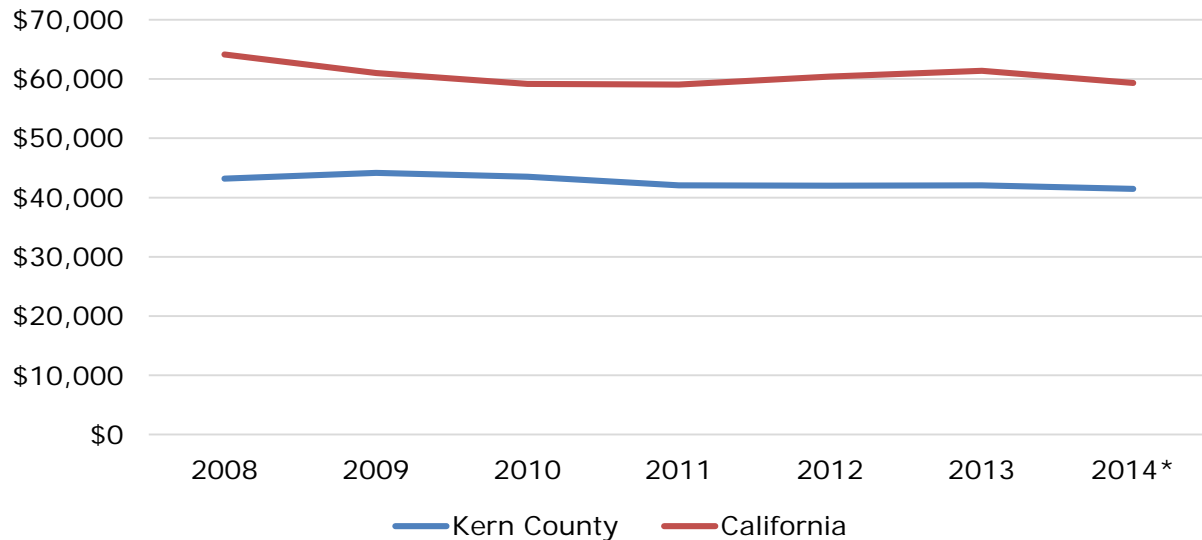
Source: KCNC 2015 Report Card.

Figure 5 further identified the mode of child ethnic distribution in the Latino category. The result aggregation showed 14,197 children under age 1, 28,440 children at ages 1-2, and 42,839 children at ages 3-5. On average, approximate 14,000 children were born in each 12-month period, suggesting stability of the population demand for early childhood services in Kern County.

<sup>8</sup> American Community Survey, Form S0901.

Across the nation, more than one in four Latino children (29%) live in food-insecure households as compared to one in seven (15%) White, non-Hispanic children (Coleman-Jensen, Rabbot, Gregory, & Singh, 2015). The economic disparity is also reflected at the family level, particularly during the recent California recession. Figure 6 indicated that the median family income in Kern County was 32% less than the state average over the past eight years.

**Figure 6: Trend of Median Income for Families in Kern County and California**

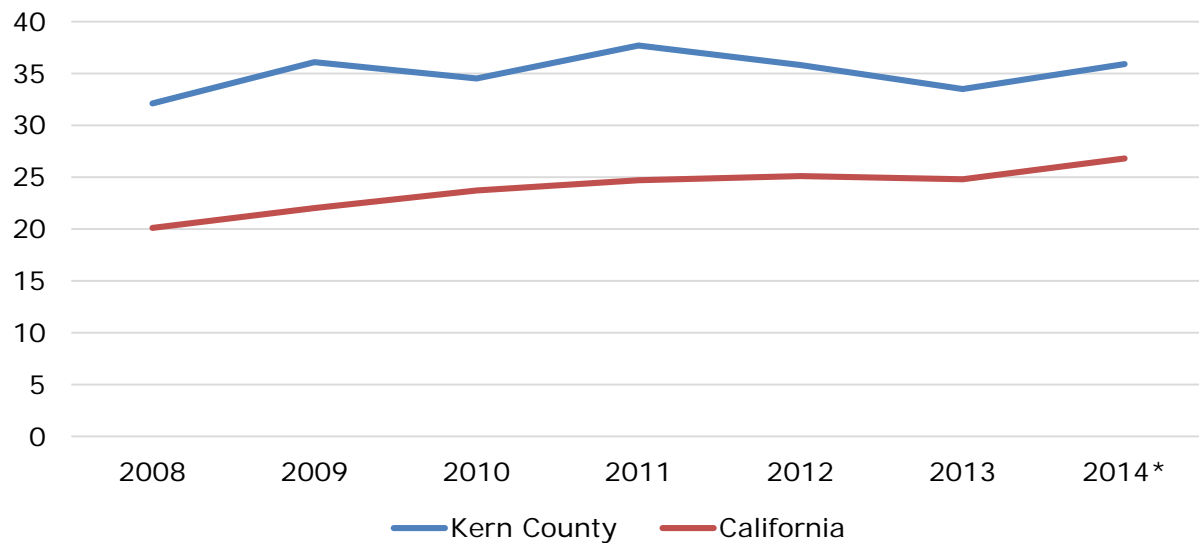


\*2014 results were estimated from KCNC's past records.

According to the National Center for Children in Poverty (2014), 22% of all children lived in families with incomes below the federal poverty level. The rate in California has surpassed the national average since 2008 (Figure 7). Meanwhile, Kern County's poverty rate for children under age 5 was far above the rate at the state and national levels. The trend of family income in Figure 6 corroborated with the pattern of poverty rate in Figure 7 to confirm the limited family resources in this region. Therefore, First 5 Kern support is needed across childrearing communities in Kern County.

In summary, an examination of the population background revealed strong demands on early childhood services. The age distribution illustrated stability of the local child population across different ethnic groups. Cultural diversity has been illustrated by a large percent of children with Latino origin. Thus, bilingual services played an important role to support child health and development in poverty-stricken communities. Because Proposition 10 does not designate more funding for traditionally underserved areas, First 5 Kern must cover additional cost for program delivery. The concerted effort has led stakeholders to conclude that "Kern County's Commission is a leader at the state level and serves as a model for others" (Brown Armstrong Accountancy, 2015, p. 3).



**Figure 7: Trend of Poverty Rate for Children Under Age 5**

\*2014 results were estimated from KCNC's past records.

### First 5 Kern Fund Allocation

In comparison to other commissions, First 5 Kern is unique in serving the third largest county of California by land area<sup>9</sup>. At the county seat, Bakersfield population has surpassed well-known metropolitan cities like St. Louis. In contrast, Inyo County covers a land area larger than Kern County, but its population is around 2% of the Kern population. Hence, First 5 Kern services not only covered a large land area, but also addressed extensive population demands. In this year, frugal measures have been taken to reduce administrative spending and channel more resources for direct services. As Brown Armstrong Accountancy (2015) reported, "Payroll and employee benefits were under budget by \$109,079 and \$60,077, respectively, due to management's decision not to implement a cost of living raise and fill a vacant position" (p. 4).

The commission fund allocation was aligned with the Strategic Plan (First 5 Kern, 2015a). As was stipulated by the state commission, "While counties design their programs to fit their local needs, they must provide services in each of the following four focus areas: Child Health, Child Development, Family Functioning, Systems of Care."<sup>10</sup> Table 3 shows a match of the four focus areas between First 5 Kern and the State Commission.

**TABLE 3: FOCUS AREA ALIGNMENTS AT LOCAL AND STATE LEVELS**

State Focus Area		First 5 Kern Focus Area
I.	Child Health	Health and Wellness
II.	Family Functioning	Parent Education and Support Services
III.	Child Development	Early Childcare and Education
IV.	Systems of Care	Integration of Services

<sup>9</sup> [http://www.california-demographics.com/counties\\_by\\_population](http://www.california-demographics.com/counties_by_population)

<sup>10</sup> First 5 California (2010). *2009-2010 annual report*. Sacramento, CA: Author.

## Vision Statement

The vision of First 5 California is for all of the state's children to receive the best possible start in life and thrive (First 5 California, 2015). In line with the commitment at the state level, First 5 Kern developed a vision statement to address local needs:

All Kern County children will be born into and thrive in supportive, safe, loving homes and neighborhoods and will enter school healthy and ready to learn. (First 5 Kern, 2015a, p. 2)

The vision is worded as "A broad, general statement of the desired future" according to the *Guidelines for Implementing the California Children and Families Act* (First 5 California, 2010, p. 28). Throughout this funding cycle, local Strategic Plans were updated annually according to this vision statement.

## Mission Statement

Proposition 10 dictates that

The duties of each county commission include evaluating the current and projected needs of young children and their families, developing a strategic plan that promotes a comprehensive and integrated system of early childhood development services that addresses community needs, determining how to expend local monies available from the state Children and Families Trust Fund, and evaluating the effectiveness of programs and activities funded in accordance with the strategic plan<sup>11</sup>.

To prioritize local services, public hearings were held regularly across this funding cycle to solicit community input for improvement of early childhood support. The strategic planning has led First 5 Kern to embrace the following mission statement:

To strengthen and support the children of Kern County prenatal to five and their families by empowering our providers through the integration of services with an emphasis on health and wellness, parent education, and early childcare and education. (First 5 Kern, 2015a, p. 2)

This mission statement incorporated keywords to describe service foci in Child Health ("health and wellness"), Family Functioning ("parent education"), Child Development ("early childcare and education"), and Systems of Care ("integration of services"). In addition to the program accountability, the mission statement clarified service recipients as "the children of Kern County prenatal to five and their families" to address the population accountability.

Altogether the vision and mission statements fulfilled the intent of Proposition 10 to "facilitate the creation and implementation of an integrated, comprehensive, and collaborative system of information and services to enhance optimal early childhood development" [Section 5(a)].

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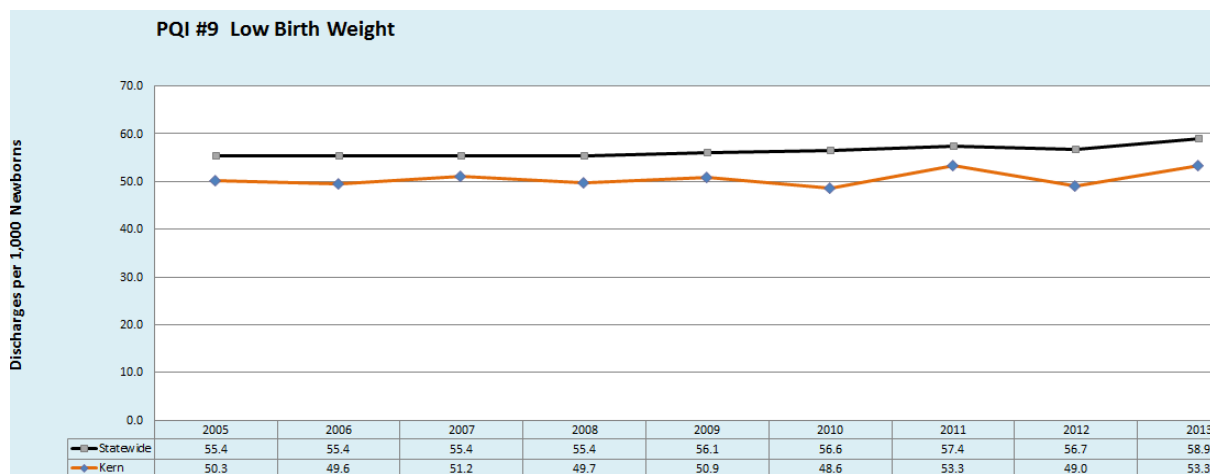
<sup>11</sup> <http://first5association.org/overview-of-proposition-10/>

## Countywide Indicators in Each Focus Area

It was stipulated by Proposition 10 that “each county commission shall conduct an audit of, and issue a written report on the implementation and performance of, their respective functions during the preceding fiscal year” (p. 12). To ensure objectivity of the reporting, external data are employed in this section to indicate health and education conditions for the youngest children in Kern County.

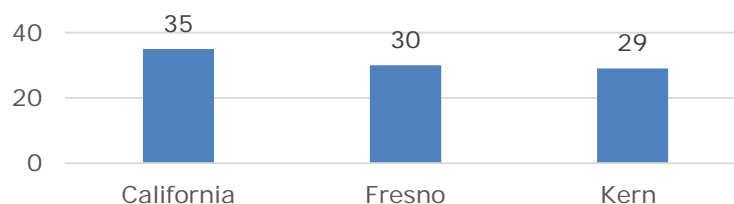
In the past, a report showed less than a 0.6% gap in the rate of low birth weight (LBW) between Kern County and California (Wang, 2015). Children with LBW typically demand more medical attention. OSHPD plotted trends of the annual hospitalization rate for children with LBW. Figure 8 shows Kern County's rate below the state average during the 2005-2013 period. A 5% gap is estimated for FY 2014-15 based on the trend prediction. The low hospitalization rate in Kern County suggests good healthcare support for children with LBW this year.

**Figure 8: Hospitalization Rate for Children with LBW<sup>12</sup>**



In comparison to the state average and a neighbor county index, Kern County also had a lower percent of family requests for infant care, which confirmed availability of early childhood service at home settings (Figure 9).

**Figure 9: Percent of Family Requests for Infant Care<sup>13</sup>**

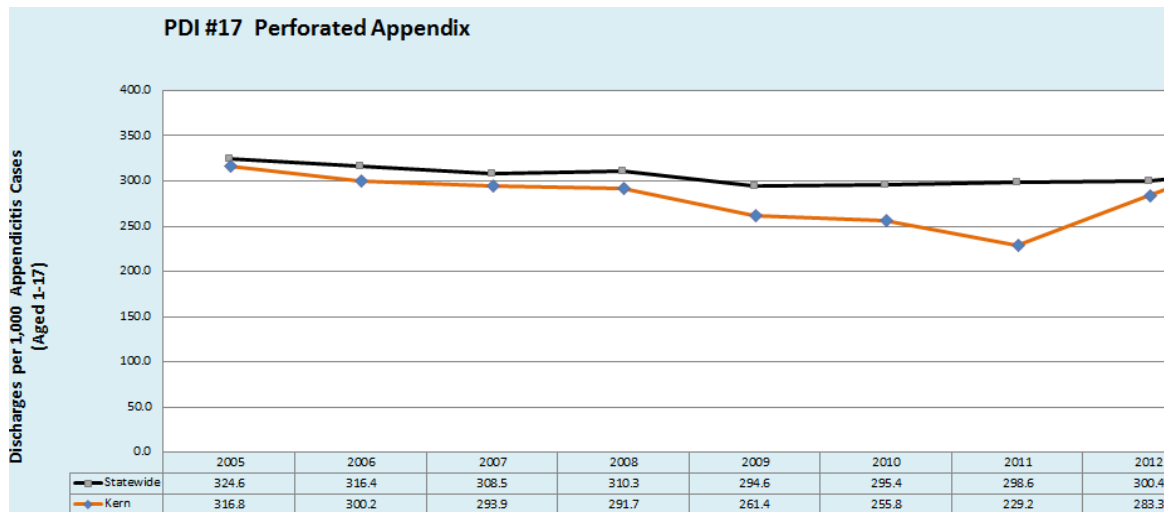


<sup>12</sup> [http://www.oshpd.ca.gov/HID/Products/PatDischargeData/AHRQ/PDI/PDI\\_Trends\\_V45\\_2005-2013.xlsx](http://www.oshpd.ca.gov/HID/Products/PatDischargeData/AHRQ/PDI/PDI_Trends_V45_2005-2013.xlsx)

<sup>13</sup> Source: <http://www.kidsdata.org/topic/565/child-care-requests-age/table#fmt=761&loc=2,362,357&tf=67&ch=978,979,980,981,982,983&sortColumnId=0&sortType=asc>

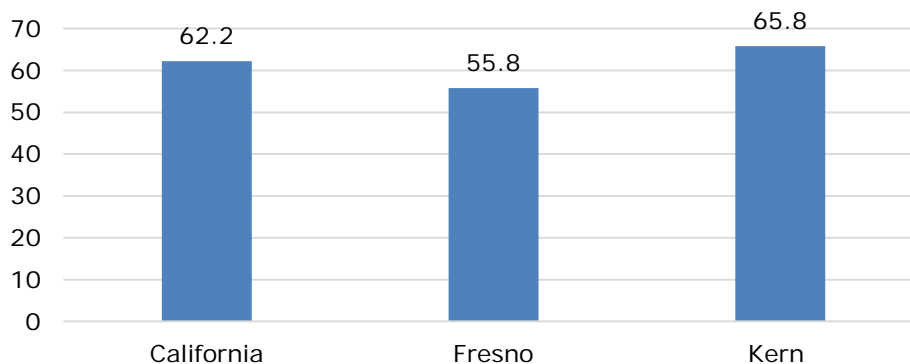
At the family level, health conditions are indicated by perforated appendix (PA) to represent the rate of detecting appendicitis before perforation. Thus, the higher the PA, the lower the quality of health (Humes & Simpson, 2006). In comparison to the state average, Figure 10 illustrated low PA rates during 2005-2012, which suggested fewer incidences of preventable complications for hospitalization in Kern County.

**Figure 10: Trend Comparison on Perforated Appendix<sup>14</sup>**



In supporting child development, Kidsdata.org provided an index to indicate percent of young children who read books with their parents every day<sup>15</sup>. The results in Figure 11 show that the percent for Kern County is higher than the average rate across California. In comparison to a neighbor county, Kern County's result is 10% higher.

**Figure 11: Percent of Young Children Reading Books with Parents Everyday**



<sup>14</sup> [http://www.oshpd.ca.gov/HID/Products/PatDischargeData/AHRQ/PDI/PDI\\_Trends\\_V45\\_2005-2013.xlsx](http://www.oshpd.ca.gov/HID/Products/PatDischargeData/AHRQ/PDI/PDI_Trends_V45_2005-2013.xlsx)

<sup>15</sup> <http://www.kidsdata.org/topic/781/reading-with-parents/table#fmt=1191&loc=2,357,362&tf=77&ch=1128,1127,1126&sortColumnId=0&sortType=asc>

To enhance partnership building, First 5 Kern promoted public awareness of child needs and local supports across state, county, and community levels. In FY 2014-15, First 5 Kern leveraged \$2,802,248 from local community partners. Table 4 lists 42 outreach services that are accomplished by First 5 Kern beyond administering the Children and Families First Trust Fund in Kern County.

**TABLE 4: FIRST 5 KERN'S OUTREACH EFFORT TO PROMOTE PUBLIC AWARENESS**

Event	Initiator	Participant	Count
Community	<ul style="list-style-type: none"> <li>• First 5 Kern Newsletter</li> <li>• First 5 Kern Strategic Plan</li> <li>• First 5 Kern Website</li> <li>• Rotary Groups</li> </ul>	<ul style="list-style-type: none"> <li>• Community Fairs – Exhibit Booth (8)</li> <li>• Community Presentations (9)</li> </ul>	21
County	<ul style="list-style-type: none"> <li>• Chamber of Commerce Governmental Review Council</li> <li>• Kern County Board of Supervisors Meetings</li> <li>• Kern County School Boards Association</li> <li>• News Conferences (3)</li> <li>• Nurturing Parenting – Best Practices Meetings</li> <li>• Tehachapi City Council</li> </ul>	<ul style="list-style-type: none"> <li>• Kern Council for Social Emotional Learning Meetings</li> <li>• Kern County Tobacco Free Coalition</li> <li>• Kern County Network for Children Collaborative</li> <li>• Kern County Network for Children Board of Directors</li> <li>• Children's Health Initiative of Kern County - Outreach, Enrollment, Retention Utilization Committee</li> <li>• Purple Ribbon Month Committee – Safety in and around vehicles</li> <li>• Safely Surrendered Baby Committee</li> <li>• Water Safety Coalition</li> </ul>	16
State		<ul style="list-style-type: none"> <li>• First 5 California Meetings</li> <li>• First 5 Association of California Meetings</li> <li>• First 5 Association Fiscal Summit</li> <li>• First 5 California Statewide Communications Region Representative</li> <li>• Central Valley Regional Meeting</li> </ul>	5

Note: Numbers inside the parentheses are the counts for reoccurring events.

In addition, First 5 Kern staff led two local initiatives to support child health and school readiness. They also participated in 15 collaborative partnerships throughout Kern County (Table 5). Across the year, the commission provided \$19,214.76 to support ten community events. The mutual support demonstrates First 5 Kern's role as an active initiator and participant in the local capacity building.

**TABLE 5: FIRST 5 KERN'S LEADERSHIP ROLES IN LOCAL COMMUNITIES**

Initiator	Participant
<ul style="list-style-type: none"> <li>Children's Health Initiative – Outreach, Enrollment, Retention and Utilization Committee</li> <li>School Readiness Coordinators Meeting – Facilitator</li> </ul>	<ul style="list-style-type: none"> <li>Bakersfield College Child Development Advisory Committee</li> <li>Buttonwillow Collaborative</li> <li>Early Childhood Council of Kern Meetings</li> <li>Community Connection for Childcare Foundation Advisory Committee Meetings</li> <li>East Kern Collaborative</li> <li>Good Neighbor Festival Committee</li> <li>Greenfield Collaborative</li> <li>H.E.A.R.T.S Connection</li> <li>Lost Hills Collaborative</li> <li>Medically Vulnerable Care Coordination Committee</li> <li>Richardson Collaborative</li> <li>Shafter Collaborative</li> <li>Southeast Neighborhood Collaborative</li> <li>South Valley Neighborhood Partnership Arvin/Lamont Weedpatch Collaborative</li> </ul>

In strengthening the systems of care, county commissions are expected to act "as the 'glue' to bring services together and fill critical gaps that no other funding source is able to address" (First 5 Association of California, 2009 p. 7). At the beginning of FY 2014-15, a service gap was revealed when the Early Intervention Program (EIP) ended its contract. First 5 Kern did not return the entire EIP fund to its reserve. Instead, a contract was amended with Richardson Special Needs Collaborative (RSNC) to fill the gap with additional mental health services.

In retrospect, First 5 Kern implemented rigorous quality control in fund administration. "Contractors are held to strict standards of financial and program compliance. The Commission also performs administrative site visits to monitor contract compliance with the requirements of their general agreement and to assist in program evaluation, sustainability, and improvement" (Brown Armstrong Accountancy, 2015, p. 3). As a result, Proposition 10 funding was employed in Kern County to serve more children ages 0-5. For instance, First 5 Kern funded programs to serve a total of 26,301 children<sup>16</sup>. In contrast, the count from Fresno was 15,280<sup>17</sup>.

## Evaluation Framework

Guided by the local Strategic Plan, First 5 Kern has contractually required service providers to single out *needs statements* and *measurable objectives* in a Scope of Work-Evaluation Plan (SOW-EP) that delineated resources, data collection tools, result indicators, performance milestones, and program targets. Meanwhile, the evaluation

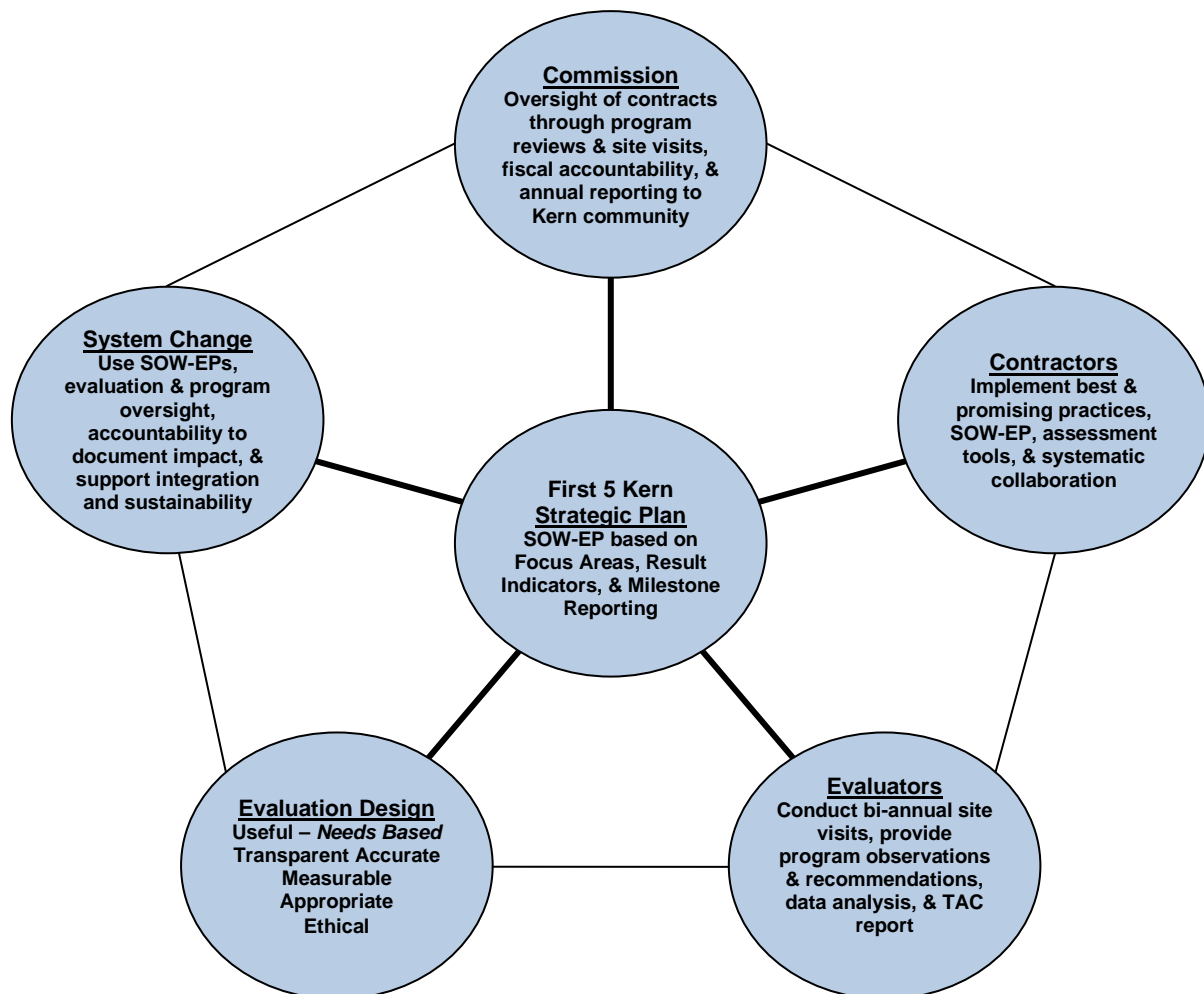
<sup>16</sup> <http://first5association.org/county-commissions/kern-county/>

<sup>17</sup> <http://first5association.org/county-commissions/fresno-county/>

team attends TAC meetings regularly to support needs-based assessment and provide input for program enhancement.

While addressing the local service needs, the report development follows state guidelines. First 5 California (2010) suggested an evaluation framework to include both *needs-based assessment* and *asset-based assessment*. Under the leadership of the First 5 Kern Commission, asset-based assessment is conducted quarterly to monitor state investment and service delivery at the program level. First 5 Kern also gathers information from program reviews and site visits to identify service gaps across different communities. In collaboration with experts from an IRB panel, the site visits are conducted professionally to support *adequate, transparent, and accurate* data collection. Evaluation findings are employed to support new recommendations for program improvement. The entire Evaluation Framework is delineated in Exhibit 2 to address results-based accountability according to the state guidelines (First 5 California, 2010) and the local Strategic Plan (First 5 Kern, 2015a).

## EXHIBIT 2: FIRST 5 KERN EVALUATION FRAMEWORK





In summary, First 5 Association of California (2009) pointed out, “To fully appreciate the effect that First 5 has had, it is necessary to understand the many roles that are served by First 5 – roles that were not being addressed or not fulfilled sufficiently before First 5 was created” (p. 7). Prior to the passage of Proposition 10, no Strategic Plan was developed for early childhood services in Kern County, nor did the service integration become a focus area to support children ages 0-5 and their families.

Guided by its vision and mission statements, First 5 Kern funded direct services in *Child Health, Family Functioning, and Child Development*, and sustained partnership building to enhance the local *Systems of Care* for children ages 0-5. The countywide impact has been illustrated by indicators on the wellbeing of children from multiple sources, such as health data from OSHPD and education data from Kidsdata.org. The local service outreach is aligned with First 5 Kern’s Strategic Plan to “advocate for children from prenatal through age five and their families” (p. 2).

### Structure of this Report

Chapter 1 of this report provides an overview of First 5 Kern’s vision, mission, and partnership building. To triangulate the external data on the countywide impact at the commission level, service outcomes are examined across programs in the first three focus areas, *Child Health, Family Functioning, and Child Development* (Chapter 2). It was further indicated in First 5 Kern’s Strategic Plan that “Integration of Services ensures collaboration with other agencies, organizations and entities with similar goals and objectives to enhance the overall efficiency of provider systems” (First 5 Kern, 2015a, p. 6). Interview data were aggregated across 39 programs to evaluate effectiveness of partnership building in the fourth focus area, *Systems of Care* (Chapter 3).

In 2014, the Kern County Board of Supervisors presented First 5 Kern a certificate of recognition for its 15 years of service to Kern County children and families. To support justification of program accountability, trend data have been gathered on the time dimension from *Core Data Elements* (CDE) surveys and *Family Stability Rubric* (FSR) assessments. CDE and FSR results are analyzed in Chapter 4 to describe sustainable service improvement between adjacent years. In supporting a “turning the curve” process for program improvement, this report ends with a *Conclusions and Future Directions* chapter to highlight exemplary programs in a Commission Report to the State, review recommendations from last year, and adduce new recommendations to maintain the momentum of ongoing progress.

## Chapter 2: Impact of First 5 Kern-Funded Programs

First 5 Kern attached great importance to direct services for the youngest children and their families in Kern County. While administrative costs in other counties accounted for 8% of Proposition 10 funding<sup>18</sup>, First 5 Kern kept the indirect spending under 6.89% in FY 2014-15, and thus, channeled more than 93% of the Proposition 10 tax revenue to focus areas of direct services, *Child Health*, *Family Functioning*, and *Child Development*. In addition, “One result area, Systems of Care, differs from the others. It consists of programs and initiatives that support program providers in the other three result areas” (First 5 California, 2013, p. 12). Because *Systems of Care* do not involve additional program creation, the Commission funded a total of 39 service providers according to its Strategic Plan.

At the program level, Richardson Special Needs Collaborative (RSNC) offered Dinosaur School group therapy services to replace the Early Intervention Program (EIP) coverage. As a result, the original EIP outcomes, including results from Sutter-Eyberg Student Behavior Inventory-Revised (SESBI) and Eyberg Child Behavior Inventory (ECBI), were gathered by RSNC to assess the impact on mental health improvement. Other programs continued their existing data collection to monitor service outcomes across this funding cycle. To justify Results-Based Accountability, program-specific findings are described in Chapter 2 based on service classifications in *Child Health*, *Family Functioning*, and *Child Development*. *Systems of Care* are addressed in Chapter 3 to assess effectiveness of service integration across programs.

### (I) Improvement of Child Health

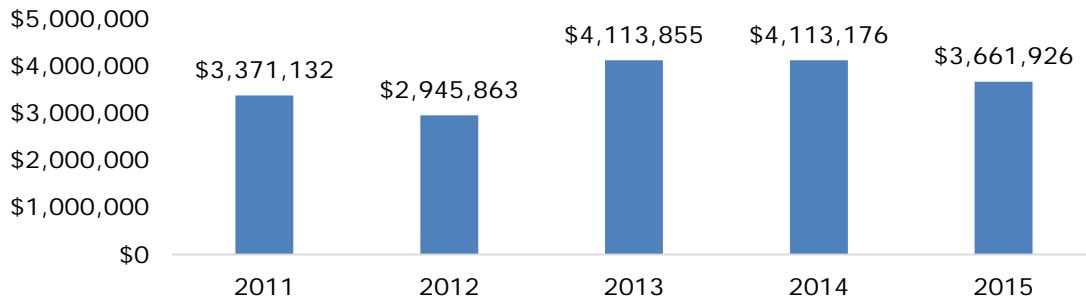
In the past, state budget deficit has been an issue in California. It was reported that “Health and human services programs that serve children are among the most seriously affected by this lack of funding” (California Assembly Committee on Budget, 2011, p. 1). To alleviate the fund shortage, First 5 Kern leveraged external support and expanded service outreach in FY 2014-15. One initiative was linked to *Covered California*, a new state program for implementing the federal Patient Protection and Affordable Care Act in California. Payments from *Covered California* were employed by the Successful Application Stipend (SAS) program to fund services from 19 Certified Enrollment Entities and 124 Certified Enrollment Counselors. Accordingly, children were guaranteed access to healthcare services under a proper insurance coverage. The fund recruitment has saved approximate \$500,000 from Proposition 10 investment this year (see Figure 12).

Within this funding cycle, Assembly Bill 99 (AB99) was signed by Governor Brown in 2011 with intention to deplete \$11.7 million from First 5 Kern and use the funds to amend the state budget deficit. Consequently, a local plan was introduced to set aside a quarter of Proposition 10 funding across programs (Wang, 2012). When AB99 failed through court hearings, the Commission did not return the funds to its reserve. Instead, First 5 Kern used the money to amend shortage from state funding and stabilize service delivery throughout this funding cycle. The commitment was reflected by investment in FY 2014-15 that was relatively higher than the first two years of this funding cycle. If it

<sup>18</sup> <http://www.first5fresno.org/wp-content/uploads/2014/05/A9-Agenda-Item-3-F5FC-2013-2015-Proposed-Two-Year-Budget.pdf>

was not because of the savings from programs like *Covered California*, First 5 investment in *Child Health* could have reached the highest level in Figure 12.

**Figure 12: First 5 Kern Annual Investment in Child Health**



### Delivering of Child Health Service According to the Strategic Plan

Built on strategic support at the commission level, mobile programs were offered in *Child Health* to reach mountain, valley, and desert communities. For instance, Kern County Children's Dental Health Network (KC\_Dental) delivered services at multiple sites of Kern County (see Figure 13). In 2000, hygienists observed 57% of children with decaying teeth. In 2015, the rate was reduced to a level under 30% (Lopez, 2015). Meanwhile, the local hygiene program monitored plaque and tooth decay for 45,000 children over past 16 years<sup>19</sup>.

**Figure 13: Service Sites of Kern County Children's Dental Health Network**



Besides the countywide service for general populations, birth conditions, such as teen pregnancy and preterm birth, could demand more attention on infant health. Children are fragile and inexperienced in self-protection. Parent involvement in hazard prevention, such as water safety, is particularly important for supporting health and wellness of infants, toddlers, and preschoolers. Therefore, First 5 Kern led its service

<sup>19</sup> <http://www.kerngoldenempire.com/news/first-5-of-kern-helping-one-non-profit-keep-local-smiles-bright-and-healthy>

partners to address dual aspects of *Child Health*: (1) offer general healthcare support for all children, and (2) extend case-management services for children under special circumstances. In FY 2014-15, program funding was aligned with six objectives of *Child Health* in First 5 Kern's (2015a) Strategic Plan:

- (1) Health insurance enrollments were assisted by Successful Application Stipend (SAS) and Children's Health Initiative (CHI);
- (2) Prenatal support was provided by Black Infant Health (BIH) and Nurse Family Partnership (NFP) programs;
- (3) Medical, dental, and mental health services were delivered by Children's Mobile Immunization Program (CMIP), Kern County Children's Dental Health Network (KC\_Dental), and Richardson Special Needs Collaborative (RSNC);
- (4) Special-needs services were supported by Medically Vulnerable Infant Program (MVIP), Special Start for Exceptional Children (SSEC), and Medically Vulnerable Care Coordination Program (MVCCP);
- (5) Early health education was offered by Health Literacy Program (HLP) for both children and parents;
- (6) Injury prevention and water safety education were addressed by Make a Splash (MAS).

**TABLE 6: FEATURES OF CHILD HEALTH PROGRAMS FUNDED BY FIRST 5 KERN**

Domain	Program*	Primary Services	Age
General Services for All Children	CHI	Health Insurance Enrollment and Training	0-5
	SAS	Health Insurance Enrollment	0-5
	KC_Dental**	Mobile Program for Oral Healthcare	0-5
	CMIP	Mobile Program for Immunizations	0-5
	HLP	Health Education	0-5
	MAS	Safety Education	0-5
Services for Special-Needs Children	MVIP	Targeted Intensive Intervention	0-2
	SSEC	Targeted Intensive Intervention	0-5
	BIH	Maternal/Child Healthcare	0-2
	NFP	Maternal/Child Healthcare	0-2
	RSNC	Targeted Intensive Intervention	3-5
Coordination	MVCCP	Quality Health Systems Improvement	0-5

\*Program acronyms are listed in Appendix A. \*\*Serves children up to 7 years old in kindergarten.

In combination, *Child Health* not only provides a foundation for *Child Development* (Grason et al., 2004), but also impacts *Family Functioning* by reducing medical bills and mental stresses in childrearing households. To sustain the *Systems of Care* across focus areas, *Child Health* programs have recruited \$711,253 from 13 partners (Table 7), which addressed an expectation of First 5 Kern's (2015a) Strategic Plan, i.e., "Funded organizations will leverage resources as a result of capacity building and sustainability efforts" (p. 14).

In summary, First 5 Kern made extensive efforts to meet child service needs in local **contexts**, including supporting outreach programs across remote areas. Special needs were considered for children in the **input** phase to expand service access from minority groups, medically vulnerable infants, and children with disabilities. Care coordination was funded in the program implementation **process** to enhance local capacity building. A Results-Based Accountability model has been adopted to evaluate

program outcomes in the **product** phase. Altogether, service funding was aligned with program assessment on a well-established *Context, Input, Process, and Product* (CIPP) paradigm to examine what works, for whom, and in which context.

**TABLE 7: FUND LEVERAGE IN CHILD HEALTH FOCUS AREA**

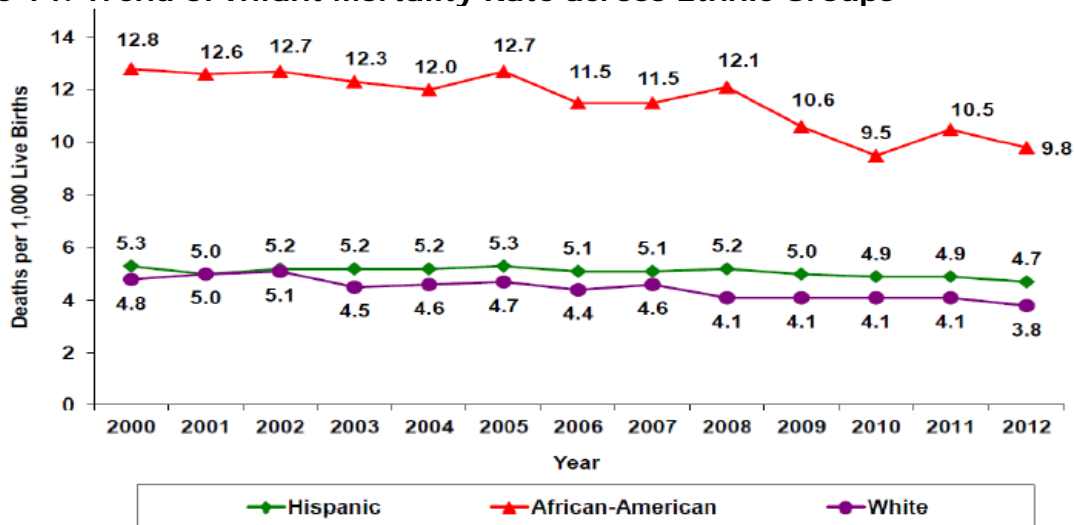
Program*	Additional Funding Sources	Amount
BIH	California Department of Public Health, Donation and Child Death Review Team	\$2,600
CHI	Dignity Health	\$82,084
HLP	Donations	\$4,700
KC_Dental	Denti-Cal and Medical Administrative Activities	\$97,814
MAS	Kaiser Permanente, USA Swimming Foundation and Donation	\$38,705
MVCCP	Health Net and Kaiser Permanente	\$15,000
MVIP	Kern Regional Center	\$201,034
NFP	Community Wellness Foundation and Targeted Case Management	\$115,945
RSNC	Donation, Covered California and Medical Administrative Activities	\$18,102
SAS	Medical Administrative Activities	\$127,769
CMIP	Corporate Donation	\$7,500

\*Program acronyms are listed in Appendix A.

### Capacity of Program Support in Child Health

An examination of early child health programs in Table 6 revealed that 11 of the 12 programs have been classified as countywide services in Table 1. Although BIH appeared to be an exception, its coverage also included four of the five supervisorial districts in Kern County (Wang & Maier, 2015). Based on a trend plot in Figure 14, BIH services were needed to reduce high mortality rates for black infants.

**Figure 14: Trend of Infant Mortality Rate across Ethnic Groups\***



Source: Ramirez and Short's (2015) presentation at a public hearing of First 5 Kern.

According to Inkelas et al. (2003), the gap in *Child Health* is a critical issue because “Racial/ethnic disparities in health status prevent many young children in California from the optimal developmental trajectories that First 5 hopes to help achieve” (p. viii). BIH coordinated support from family health advocates, group facilitators, public health nurses and social workers in its group sessions that covered important topics of cultural heritage, healthy pregnancy, nurturing, and stress management. In addition, it was reported that “Black women were more likely to report not receiving advice from their prenatal care providers about smoking cessation and alcohol use” (Kogan, Kotelchuck, Alexander, & Johnson, 1994, p. 82). BIH filled this void and case-managed 100 families to control smoke, alcohol, and substance abuse.

In strengthening child protection, Make a Splash (MAS) leveraged a total of \$38,705 from the Kaiser Permanente Operations Splash Grant and a USA Swimming Grant to offer water safety lessons for parents and children in Kern County. Since “The parent-child relationship has long been seen as a critical source of influence on child health and adjustment across multiple developmental domains” (Wilson & Durbin, 2013, p. 249), MAS provided Cardiopulmonary Resuscitation (CPR) training for 82 guardians and providers this year. During the summer months, MAS sponsored center-based water activities for 3,382 participants, including 540 pairs of parents and children.

First 5 Kern also funded the Health Literacy Program (HLP) to support child health. First 5 Association of California (2015) noted, “Healthy children have sufficient nutrition, health care, nurturing and guidance, and mental stimulation, and they live in families and communities that value them” (p. 1). While sponsoring developmental assessment for 49 children, HLP provided professional workshops for 400 parents and child educators, distributed 55 new parent kits, and extended health literacy education to 91 parents.

Beyond the family setting, “Theoretical and empirical studies of access to health care have emphasized the importance of having health insurance and a regular source of care to ensure that children have access to health services” (Medi-Cal Managed Care Division, 2013, p. 61). In FY 2014-15, Successful Application Stipend (SAS) offered assistance to 496 children for health insurance application. Children's Health Initiative (CHI) established 10 medical homes and supported 57 children with health insurance applications.

Another protective measure in *Child Health* is immunizations. It was reported that “Childhood vaccines prevent 10.5 million diseases among all children born in the United States in a given year and are a cost-effective preventive measure” (Medi-Cal Managed Care Division, 2013, p. 54). Children's Mobile Immunization Program (CMIP) established 180 immunization clinics and ensured a complete record of vaccines for 2,624 children ages 0-5. Throughout the year, a total of 12,491 vaccines were employed to update the immunization records for 4,126 children and 1,297 siblings.

The Nurse Family Partnership (NFP) program case-managed 109 families for smoking cessation and offered developmental assessments for 78 children. NFP also educated 109 families for substance abuse control and supported breastfeeding for 27 newborns. Meanwhile, Richardson Special Needs Collaborative (RSNC) case-managed 70 families and offered professional workshops for 79 parents. Home-based parent education was provided by RSNC to 58 families, and 73 parents used the RSNC resource library this year. Fifty-six children with special needs accessed mental health services from RSNC.



Beyond the mental health domain, 67 medically-fragile children received services from Special Start for Exceptional Children (SSEC) and 74 children with special needs were supported by Medically Vulnerable Infant Program (MVIP).

Smith et al. (2009) noted that “While many entities purportedly provide care coordination, there is a lack of communication among the multiple agencies serving the same child” (p. 7). To enhance service coordination, local programs in *Child Health* made 1,786 referrals to alleviate service backlogs. In particular, the Medically Vulnerable Care Coordination Project (MVCCP) received national recognition as a *Promising Practice* by the Association of Maternal & Child Health Programs in June 2015. Since 2008, MVCCP has worked with key stakeholders to coordinate services for children ages 0-5 with special healthcare needs. The efforts might have helped reduction of unintended case delays that could have resulted in greater medical costs<sup>20</sup>.

As was indicated by *Results-Based Accountability* (2012), service providers are anticipated to “Build program accountability that incorporates best practices and continuous improvement” (p. 2). In FY 2014-15, program capacities have been constantly expanded in seven fronts:

1. Development of immunization services: Last year, BIH ensured completion of all immunizations for 69 children. The child count increased to 95 this year. Meanwhile, CMIP augmented the number of immunization clinics from 178 to 180;
2. Expansion of service coverage in program-specific parent education: MAS increased its participant number from 75 in last year to 82 this year. KC\_Dental boosted the service count from 245 to 364 in the same period;
3. Broadening of healthcare access for children with special needs: MVCCP served 701 children with special needs last year. The number increased to 835 this year. RSNC also raised its service count from 52 to 56 children through its mental health support;
4. Improvement of child health conditions: The count of children with healthy birth weight increased in BIH from 27 in last year to 43 this year. NFP raised the number of breastfed newborns from 21 to 27 between the adjacent years;
5. Strengthening of child health protection: BIH increased developmental assessment coverage from 38 children last year to 49 children this year. Meanwhile, KC\_Dental increased the number of children with dental cleaning from 3,429 to 3,751. The child counts for dental sealants increased from 306 to 344;
6. Expansion of home-based and center-based services: SSEC supported more children through its center-based services. The count was 48 in last year and 67 this year. RSNC expanded its home-based parent education from 54 families last year to 58 families this year;
7. Improvement of family environment: NFP provided services to control alcohol and substance abuse. The number of families receiving the support increased from 91 in last year to 109 this year.

In summary, First 5 Kern offered a broad spectrum of services to support child health in Kern County. Program features were classified by *service types* (e.g., dental care, mental health, insurance application, parental education), *child conditions* (general support vs. special-needs assistance), *delivery methods* (group-based vs. home-based

<sup>20</sup> [http://www.amchp.org/programsandtopics/BestPractices/InnovationStation/ISDocs/MVCCP\\_CA.pdf](http://www.amchp.org/programsandtopics/BestPractices/InnovationStation/ISDocs/MVCCP_CA.pdf)



service), *facility capacities* (mobile service vs. community-based support), and *age group* (infants, toddlers, & preschoolers). Enhancement of the program impact was sustained by service demands from different stakeholders, including medically vulnerable infants, first-time mothers, and minority families, to ensure that “All children will have an early start toward good health” (First 5 Kern, 2015a, p. 5).

### Improvement of Service Outcomes across Child Health Programs

In *Child Health*, improvement of program outcomes has been tracked by service providers on multiple domains, including oral health support, parent education, and mental health program. In each domain, outcomes were documented by service counts in different categories.

#### 1. Outcome of Oral Health Services

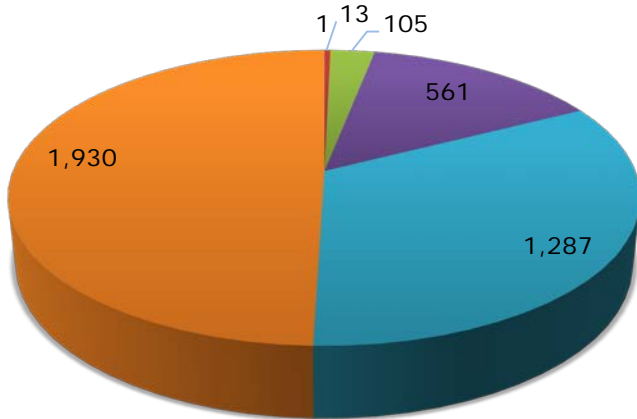
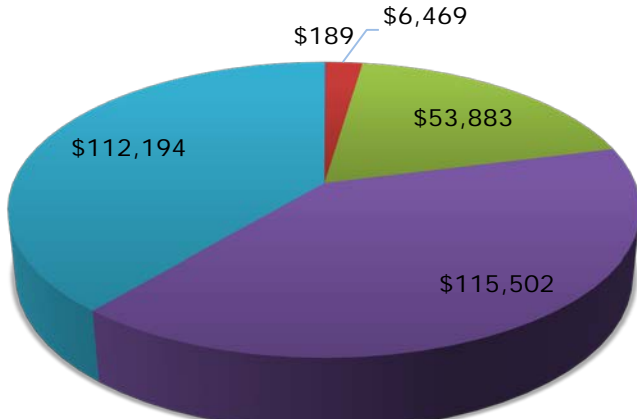
Kern County Children’s Dental Health Network (KC\_Dental) collaborated with treatment providers to offer oral health support across the county. Preventative treatments from KC\_Dental included screenings, prophylaxis, fluoride application, and sealants. In FY 2014-15, 15,650 services were provided for children ages 0-5 in the preventative support category, which allowed treatment providers to primarily focus on 2,895 restorative services (Table 8).

**TABLE 8: DENTAL SERVICES FROM DIFFERENT PROVIDERS**

Agency	Distribution of Service Counts														
Dental Health Network	<div data-bbox="397 1050 625 1438"> <ul style="list-style-type: none"> <li>Screenings</li> <li>Prophy</li> <li>Fluoride Application</li> <li>Sealants</li> <li>Toothbrush Prophy</li> <li>Fluoride Varnish Application</li> </ul> </div> <div data-bbox="722 1071 1193 1354"> <table border="1"> <caption>Dental Health Network Service Counts</caption> <thead> <tr> <th>Service Category</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>Screenings</td> <td>5,816</td> </tr> <tr> <td>Prophy</td> <td>1,991</td> </tr> <tr> <td>Fluoride Application</td> <td>1,991</td> </tr> <tr> <td>Sealants</td> <td>776</td> </tr> <tr> <td>Toothbrush Prophy</td> <td>2,538</td> </tr> <tr> <td>Fluoride Varnish Application</td> <td>2,538</td> </tr> </tbody> </table> </div>	Service Category	Count	Screenings	5,816	Prophy	1,991	Fluoride Application	1,991	Sealants	776	Toothbrush Prophy	2,538	Fluoride Varnish Application	2,538
Service Category	Count														
Screenings	5,816														
Prophy	1,991														
Fluoride Application	1,991														
Sealants	776														
Toothbrush Prophy	2,538														
Fluoride Varnish Application	2,538														
Treatment Providers	<div data-bbox="430 1585 609 1722"> <ul style="list-style-type: none"> <li>Preventative</li> <li>Restorative</li> </ul> </div> <div data-bbox="722 1522 1177 1795"> <table border="1"> <caption>Treatment Providers Service Counts</caption> <thead> <tr> <th>Service Category</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>Preventative</td> <td>281</td> </tr> <tr> <td>Restorative</td> <td>2,895</td> </tr> </tbody> </table> </div>	Service Category	Count	Preventative	281	Restorative	2,895								
Service Category	Count														
Preventative	281														
Restorative	2,895														

In comparison of the plots in Table 9, age 5 was the largest service group. However, the cost for dental services at age 5 was lower than the cost for children at age 4 (Table 9). Considering the fact that children at age 5 might have experienced longer service coverage by First 5 Kern, the lower cost suggested that KC\_Dental funding has contributed to alleviation of dental problems for young children. Altogether, the service tracking showed support of 3,897 children through KC\_Dental services in FY 2014-15.

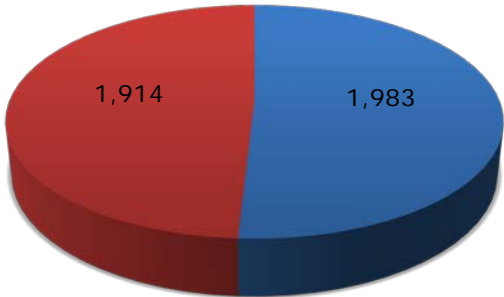
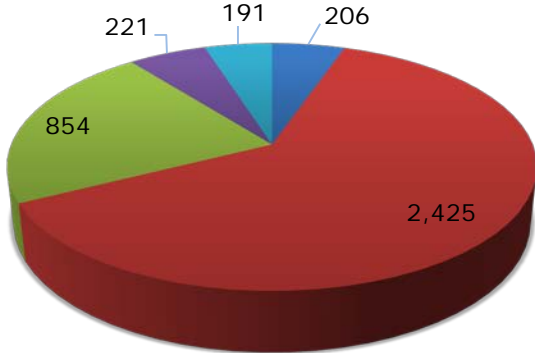
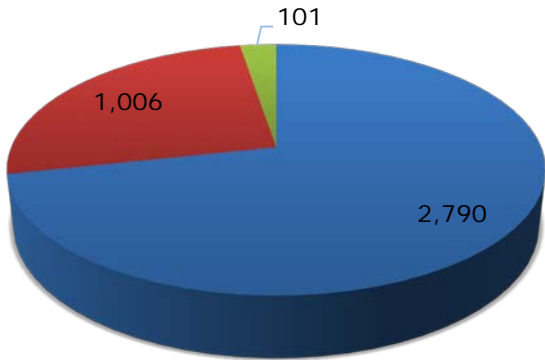
**TABLE 9: CHILD COUNT AND SERVICE COST ACROSS AGE GROUPS**

Category	Distribution across Age Groups														
Number of Children	 <p>A 3D pie chart showing the distribution of children across age groups. The largest slice is Age 5 (orange, 1,930), followed by Age 4 (light blue, 1,287), Age 3 (purple, 561), Age 2 (green, 105), Age 1 (red, 13), and Under 1 (dark blue, 1).</p> <table border="1"> <thead> <tr> <th>Age Group</th> <th>Number of Children</th> </tr> </thead> <tbody> <tr> <td>Under 1</td> <td>1</td> </tr> <tr> <td>Age 1</td> <td>13</td> </tr> <tr> <td>Age 2</td> <td>105</td> </tr> <tr> <td>Age 3</td> <td>561</td> </tr> <tr> <td>Age 4</td> <td>1,287</td> </tr> <tr> <td>Age 5</td> <td>1,930</td> </tr> </tbody> </table> <p>■ Under 1 ■ Age 1 ■ Age 2 ■ Age 3 ■ Age 4 ■ Age 5</p>	Age Group	Number of Children	Under 1	1	Age 1	13	Age 2	105	Age 3	561	Age 4	1,287	Age 5	1,930
Age Group	Number of Children														
Under 1	1														
Age 1	13														
Age 2	105														
Age 3	561														
Age 4	1,287														
Age 5	1,930														
Service Cost	 <p>A 3D pie chart showing the distribution of service cost across age groups. The largest slice is Age 4 (purple, \$115,502), followed by Age 5 (light blue, \$112,194), Age 3 (green, \$53,883), Age 2 (red, \$6,469), and Age 1 (dark blue, \$189).</p> <table border="1"> <thead> <tr> <th>Age Group</th> <th>Service Cost</th> </tr> </thead> <tbody> <tr> <td>Age 1</td> <td>\$189</td> </tr> <tr> <td>Age 2</td> <td>\$6,469</td> </tr> <tr> <td>Age 3</td> <td>\$53,883</td> </tr> <tr> <td>Age 4</td> <td>\$115,502</td> </tr> <tr> <td>Age 5</td> <td>\$112,194</td> </tr> </tbody> </table> <p>■ Age 1 ■ Age 2 ■ Age 3 ■ Age 4 ■ Age 5</p>	Age Group	Service Cost	Age 1	\$189	Age 2	\$6,469	Age 3	\$53,883	Age 4	\$115,502	Age 5	\$112,194		
Age Group	Service Cost														
Age 1	\$189														
Age 2	\$6,469														
Age 3	\$53,883														
Age 4	\$115,502														
Age 5	\$112,194														

There is no equity gap in dental services across genders. Table 10 confirmed service access by an approximately equal number of boys and girls in FY 2014-15. In

addition, the majority of children receiving dental services had Hispanic/Latino origin, which demanded culturally-appropriate service deliveries in multiple languages (Table 10).

**TABLE 10: DEMOGRAPHIC CHARACTERISTICS OF KC\_DENTAL**

Category	Service Recipients at Ages 0-5												
Gender	 <p>A 3D pie chart showing the gender distribution of service recipients. The chart is divided into two segments: a blue segment for 'Female' with a value of 1,983, and a red segment for 'Male' with a value of 1,914. A legend to the left of the chart identifies the colors: blue for Female and red for Male.</p> <table border="1"> <thead> <tr> <th>Gender</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>Female</td> <td>1,983</td> </tr> <tr> <td>Male</td> <td>1,914</td> </tr> </tbody> </table>	Gender	Count	Female	1,983	Male	1,914						
Gender	Count												
Female	1,983												
Male	1,914												
Ethnicity	 <p>A 3D pie chart showing the ethnicity distribution of service recipients. The chart is divided into five segments: a large red segment for 'Hispanic/Latino' (2,425), a green segment for 'White' (854), a blue segment for 'Black/African American' (206), a purple segment for 'Multiracial' (221), and a small cyan segment for 'Other Ethnicities' (191). A legend to the left of the chart identifies the colors: blue for Black/African American, red for Hispanic/Latino, green for White, purple for Multiracial, and cyan for Other Ethnicities.</p> <table border="1"> <thead> <tr> <th>Ethnicity</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>Black/African American</td> <td>206</td> </tr> <tr> <td>Hispanic/Latino</td> <td>2,425</td> </tr> <tr> <td>White</td> <td>854</td> </tr> <tr> <td>Multiracial</td> <td>221</td> </tr> <tr> <td>Other Ethnicities</td> <td>191</td> </tr> </tbody> </table>	Ethnicity	Count	Black/African American	206	Hispanic/Latino	2,425	White	854	Multiracial	221	Other Ethnicities	191
Ethnicity	Count												
Black/African American	206												
Hispanic/Latino	2,425												
White	854												
Multiracial	221												
Other Ethnicities	191												
Language	 <p>A 3D pie chart showing the language distribution of service recipients. The chart is divided into three segments: a large blue segment for 'English' (2,790), a red segment for 'Spanish' (1,006), and a small green segment for 'Other Languages' (101). A legend to the left of the chart identifies the colors: blue for English, red for Spanish, and green for Other Languages.</p> <table border="1"> <thead> <tr> <th>Language</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>English</td> <td>2,790</td> </tr> <tr> <td>Spanish</td> <td>1,006</td> </tr> <tr> <td>Other Languages</td> <td>101</td> </tr> </tbody> </table>	Language	Count	English	2,790	Spanish	1,006	Other Languages	101				
Language	Count												
English	2,790												
Spanish	1,006												
Other Languages	101												

KC\_Dental tracked plaque indices during initial and recheck visits for 387 children ages 0-5. The service impact was indicated by a drop of Average Plaque Index (API) from 66 in the pretest to 38 in the posttest. The improvement of oral health was statistically significant during the tracking period [ $t(386)=27.55$ ,  $p<.0001$ ]. Meanwhile, parent knowledge on dental care was assessed on a three-point scale (1=no knowledge, 2=some knowledge, and 3=full knowledge). In FY 2014-15, significant increases occurred on the average score of 304 parents from 2.32 in the pretest to 2.99 in the posttest [ $t(302)=20.39$ ,  $p<.0001$ ]. In comparison to last year, the parent count increased from 244 in last year to 304 this year.

## 2. Results of Mental Health Support

RSNC offered child therapy and parent education through its mental health program. The program effectiveness has been evaluated by parent assessment of child performance using the Eyberg Child Behavior Inventory (ECBI). In addition, preschool teachers provided performance assessment of 46 children *before* and *after* RSNC services using the Sutter-Eyberg Student Behavior Inventory-Revised (SESBI-R).

The ECBI results from 45 parents were examined under a pretest and posttest setting. Parent feedback showed significant reduction of child *behavior problem* [ $t(44)=4.87$ ,  $p=.0002$ ] and its *intensity* [ $t(44)=4.52$ ,  $p<.0001$ ] during RSNC intervention. The corresponding effect sizes reached 1.47 and 1.36, respectively. Cohen (1988) defined 0.8 as the threshold of effect size for strong practical impact. Hence, the result tracking confirmed strong and significant impacts of RSNC support on child behavior modification. More specifically, significant improvements were illustrated by 15 indicators of the ECBI scale (Table 11).

**TABLE 11: IMPROVEMENT OF CHILD BEHAVIOR INDICATORS IN ECBI ASSESSMENT**

<b>Eyberg Indicator</b>	<b>Statistical Testing</b>
Dawdles in getting dressed	$t(44)=2.50$ , $p=0.0162$
Refuses to go to bed on time	$t(44)=2.33$ , $p=0.0244$
Does not obey house rules on own	$t(43)=3.06$ , $p=0.0038$
Refuses to obey until threatened with punishment	$t(43)=3.12$ , $p=0.0032$
Argues with parents about rules	$t(43)=2.61$ , $p=0.0123$
Gets angry when does not get own way	$t(41)=2.62$ , $p=0.0122$
Has temper tantrums	$t(44)=4.36$ , $p<0.0001$
Assesses adults	$t(44)=2.05$ , $p=0.0465$
Whines	$t(44)=2.85$ , $p=0.0067$
Hits parents	$t(42)=2.06$ , $p=0.0456$
Destroys toys and other objects	$t(44)=3.10$ , $p=0.0034$
Verbally fights with friends own age	$t(43)=2.78$ , $p=0.0081$
Constantly seeks attention	$t(44)=2.74$ , $p=0.0087$
Is easily distracted	$t(43)=3.37$ , $p=0.0016$
Has short attention span	$t(43)=3.33$ , $p=0.0018$
Is overactive or restless	$t(44)=2.17$ , $p=0.0358$

Cronbach's alpha index was computed to assess consistency of the ECBI outcomes. "By convention and agreement among psychometric researchers and scale developers, Cronbach's alphas above 0.7 are considered to be adequate for use in practice, alphas above 0.8 are considered to be strong" (Kirk & Martens, 2014, p. 5). The results showed

Cronbach's alpha equal to 0.89. Thus, the ECBI results demonstrated high consistency in assessing child behavior improvements.

The SESBIR results indicated a significant decrease in *behavior problem* [ $t(45)=6.09$ ,  $p<.0001$ ] and *intensity* [ $t(45)=5.84$ ,  $p<.0001$ ] between pretest and posttest. Cronbach's alpha index for the teacher feedback was above 0.95, which suggested consistency in the SESBIR assessment outcomes. The findings supported Querido and Eyberg's (2003) assertion for adopting the teacher rating scale to evaluate disruptive behaviors of preschool children. Specific improvements were illustrated by 36 SESBIR indicators in Table 12.

**TABLE 12: IMPROVEMENT OF CHILD BEHAVIOR INDICATORS IN SESBIR ASSESSMENT**

<b>Sutter Eyberg Indicator</b>	<b>Statistical Testing</b>
Has temper tantrums	$t(45)=3.83$ , $p=0.0004$
Pouts	$t(45)=3.91$ , $p=0.0003$
Teases or provokes other students	$t(45)=4.95$ , $p<0.0001$
Lies	$t(43)=2.31$ , $p=0.0259$
Acts frustrated with difficult tasks	$t(45)=2.30$ , $p=0.0263$
Does not obey school rules on his/her own	$t(44)=5.94$ , $p<0.0001$
Demands teacher attention	$t(45)=5.57$ , $p<0.0001$
Dawdles in obeying rules or instructions	$t(44)=4.72$ , $p<0.0001$
Acts bossy with other students	$t(45)=4.67$ , $p<0.0001$
Gets angry when doesn't get his/her own way	$t(45)=5.02$ , $p<0.0001$
Interrupts teacher	$t(44)=5.08$ , $p<0.0001$
Impulsive, acts before thinking	$t(44)=4.63$ , $p<0.0001$
Refuses to obey until threatened with punishment	$t(45)=5.29$ , $p<0.0001$
Had difficulty staying on task	$t(45)=5.62$ , $p<0.0001$
Blames others for problem behaviors	$t(45)=4.53$ , $p<0.0001$
Has difficulty entering groups	$t(45)=5.60$ , $p<0.0001$
Is easily distracted	$t(45)=5.13$ , $p<0.0001$
Has difficulty accepting criticism or correction	$t(45)=4.40$ , $p<0.0001$
Fails to finish tasks or projects	$t(45)=2.49$ , $p<0.0001$
Sasses teachers	$t(44)=4.08$ , $p=0.0002$
Verbally fights with other students	$t(45)=2.82$ , $p=0.0071$
Is overactive or restless	$t(45)=2.74$ , $p=0.0089$
Physically fights with other students	$t(44)=4.09$ , $p=0.0002$
Makes noises in class	$t(45)=3.38$ , $p=0.0015$
Acts defiant when told to do something	$t(45)=5.25$ , $p<0.0001$
Argues with teacher about rules and instructions	$t(45)=3.86$ , $p=0.0004$
Interrupts other students	$t(45)=6.05$ , $p<0.0001$
Is noisy	$t(45)=4.68$ , $p<0.0001$
Has trouble awaiting turn	$t(45)=4.17$ , $p=0.0001$
Talks excessively	$t(45)=2.79$ , $p=0.0078$
Fidgets or squirms in seat	$t(45)=3.79$ , $p=0.0004$
Fails to listen to instructions	$t(44)=5.53$ , $p<0.0001$
Is touchy or easily annoyed	$t(45)=5.16$ , $p<0.0001$
Bothers others on purpose	$t(45)=6.57$ , $p<0.0001$
Has trouble paying attention	$t(45)=5.44$ , $p<0.0001$
Had difficulty staying seated	$t(45)=4.39$ , $p<0.0001$

Besides RSNC, First 5 Kern funded Special Start for Exceptional Children (SSEC) to provide early intervention services for children with disabilities and other special needs. The Desired Results Developmental Profile-Access (DRDP-Access) instrument was employed to evaluate the impact of SSEC services. The DRDP-Access data contained pretest and posttest results from 14 children. Despite the small sample size, significant improvement has been identified by indicators of *Self-Regulation* [ $t(13)=3.45$ ,  $p=0.0261$ ] and *Motor-Skill* [ $t(13)=3.50$ ,  $p=0.0250$ ]. Overall, mental health supports have benefited children in both RSNC and SSEC programs.

### 3. Improvement of Early Health Education

In FY 2014-15, a *2015 Children's State Policy Agenda* was released by First 5 California (2015c) to "Improve parent and young children's knowledge about and access to healthy foods and physical activity" (p. 1). Maben (2015) further stressed the importance of parent engagement in child health services. In Kern County, improvement of early health education has been pursued on three fronts: (1) health literacy training, (2) parenting skill improvement, and (3) early childhood support.

Bakersfield Adult School's Health Literacy Program (HLP) tracked learning outcomes of 108 parents from its health literacy education service. Based on a "Be Choosy, Be Healthy" assessment, significant improvement has been observed in the domains of *health knowledge* [ $t(107)=3.09$ ,  $p=.0025$ ] and *healthy eating* [ $t(107)=2.15$ ,  $p=.0337$ ]. Meanwhile, a new version of Desired Results Developmental Profile-Preschool (DRDP-PS) assessment was adopted to gather information on child development. Based on the results from independent sample t test, the DRDP-PS data indicated significant program impacts in multiple domains, including *Approaches to Learning* [ $t(71)=4.33$ ,  $p<.0001$ ], *Cognition* [ $t(71)=4.13$ ,  $p<.0001$ ], *History-Social Science* [ $t(71)=3.04$ ,  $p=.0033$ ], *Language and Literacy Development* [ $t(71)=4.02$ ,  $p=.0001$ ], *Physical Development* [ $t(71)=4.11$ ,  $p=.0001$ ], *Social and Emotional Development* [ $t(71)=4.31$ ,  $p<.0001$ ], and *Visual and Performing Arts* [ $t(71)=2.52$ ,  $p=.0139$ ].

Parenting skill enhancement was assessed on the Nurturing Skills Competency Scale (NSCS), a criterion-referenced inventory aligned with the Nurturing Parenting Curriculum (NPC). "The Nurturing Parenting Program is an internationally recognized, group-based approach for working with parents and their children in reducing dysfunction and building healthy, positive interactions" (Edwards, Landry, & Slone, 2012, p. 1). Outcomes of the NSCS assessment includes two subscales: Part A assesses knowledge of the nurturing parenting attitudes and skills and Part B covers application of nurturing parenting concepts, practices and strategies. Bavolek (2009) recommended that "The NSCS is ideally utilized as a pre and post-test" (p. 1). In this report, NSCS data were employed to assess effectiveness of parent education in RSNC, and significant improvement has been found on parenting knowledge [ $t(49)=7.85$ ,  $p<.0001$ ] and skills [ $t(49)=3.93$ ,  $p=0.0003$ ]. The corresponding effect sizes were 2.17 and 1.12, which suggested a strong practical impact of RSNC on parenting outcomes.

**TABLE 13: ASQ-3 RESULTS FROM BIH, MVIP AND NFP**

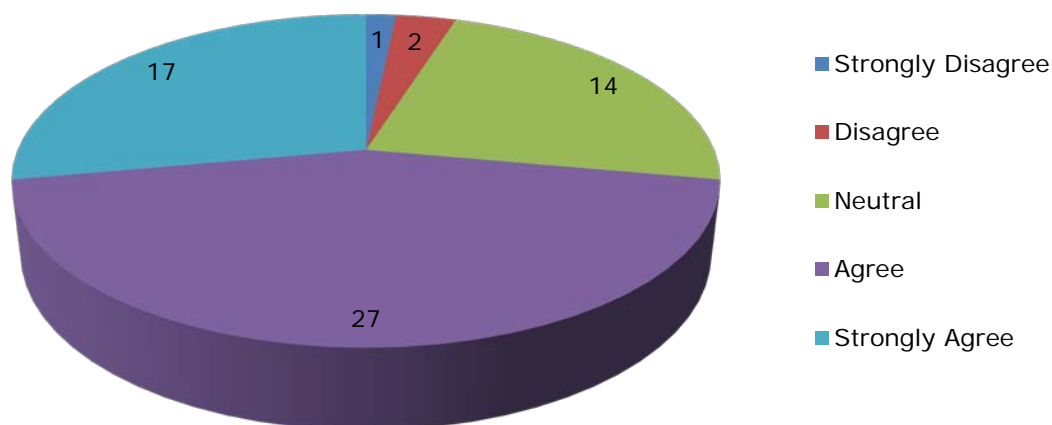
ASQ-3 Domains	BIH		MVIP		NFP	
	t Statistic*	Effect Size	t Statistic*	Effect Size	t Statistic*	Effect Size
Communication	t(13)=15.23	9.41	t(119)=17.67	3.01	t(81)=22.42	6.57
Gross Motor	t(13)=10.92	5.32	t(119)=11.98	1.66	t(81)=17.27	4.48
Fine Motor	t(13)=38.79	7.08	t(119)=11.87	2.22	t(81)=20.39	4.11
Problem Solving	t(13)=12.22	6.54	t(119)=12.79	2.28	t(81)=21.56	5.25
Personal-Social	t(13)=15.11	4.70	t(119)=14.18	2.50	t(81)=25.07	6.51

\*All t tests indicated significant difference at  $\alpha=.0001$ .

Prior to the preschool stage, researchers found a clear link between infant health and early childhood development (see Mattheus, 2013). Built on this relation, BIH, MVIP, and NFP in *Child Health* employed the Ages and Stages Questionnaire-3 (ASQ-3) to assess early development levels of 216 infants. The results showed their average performance significantly above the corresponding thresholds in *Communication*, *Gross Motor*, *Fine Motor*, *Problem Solving*, and *Personal-Social* domains. The effect sizes were consistently larger than 1.66 (Table 13). Thus, these programs demonstrated strong and significant impacts on infant growth across the ASQ-3 domains.

#### 4. Care Coordination for Medically Vulnerable Infants

In an overview of Proposition 10, First 5 Association of California stressed that “A requirement of the state laws governing the county commissions is to ensure that money from the Children and Families Trust Fund is not used to replace or ‘supplant’ existing local funding for programs and services.”<sup>21</sup> To raise the level of service delivery, MVCCP organized monthly stakeholder meetings across 40 service providers throughout the year. According to its milestone updates, MVCCP reviewed 835 cases in FY 2014-15. Figure 15 showed most respondents from local agencies *agreed* or *strongly agreed* that the networking helped find solutions for more difficult cases.

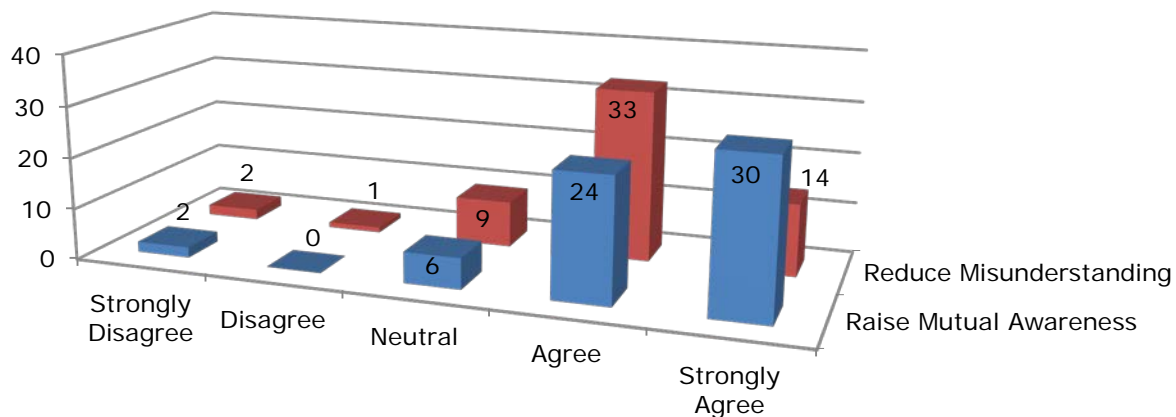
**Figure 15: Agreement about MVCCP Support for Finding Solutions**

<sup>21</sup> <http://first5association.org/overview-of-proposition-10/>



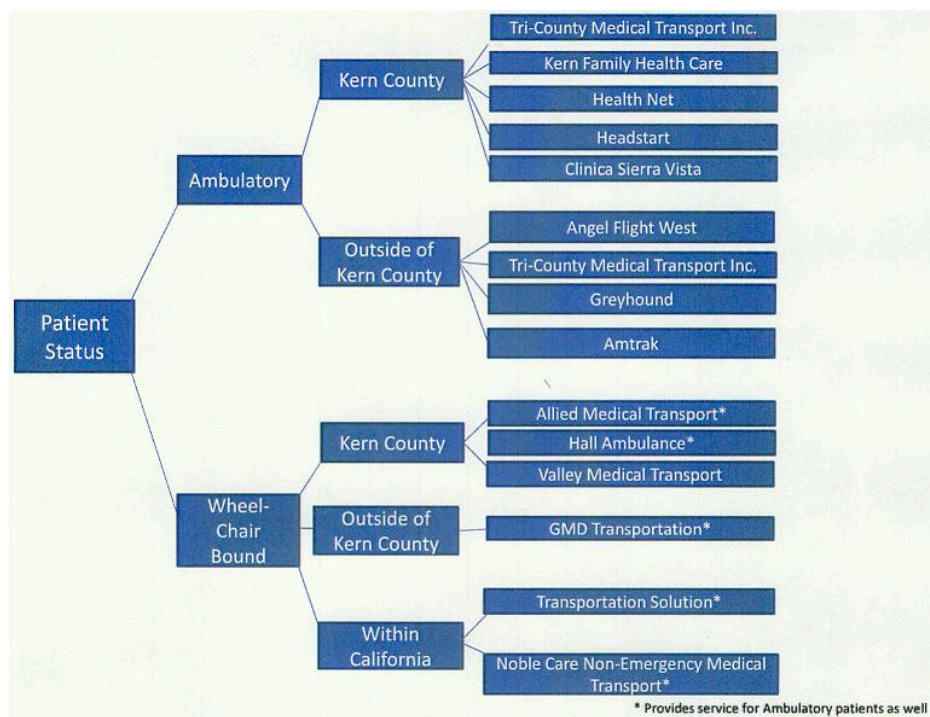
MVCCP maintained a care coordination system that is practical, affordable, and responsive to changing conditions. Figure 16 showed most partners *agreed* or *strongly agreed* that MVCCP has reduced misunderstanding of their organization functioning and increased their awareness of the service capacity in other agencies. The impact of MVCCP was also reflected in its fourth annual conference on November 6, 2014, that was attended by 187 healthcare professionals and local stakeholders.

**Figure 16: Agreement on Network Support for Partnership Building**



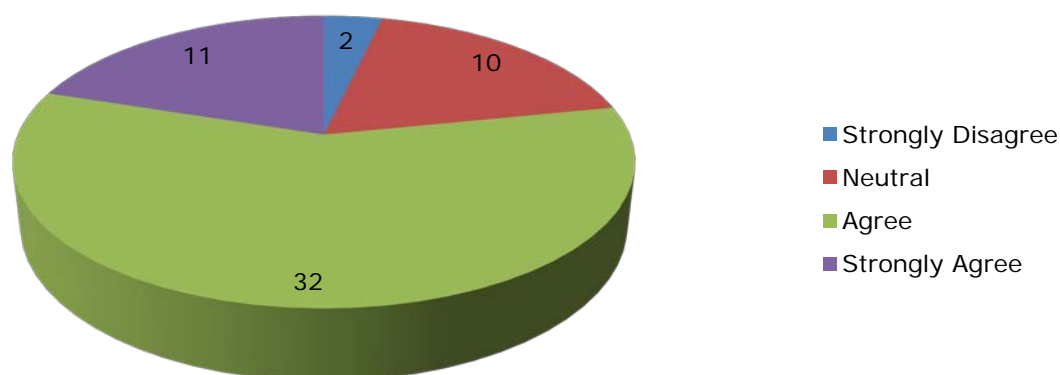
In addition to partnership building among service providers, MVCCP coordinated program access by residents in remote communities. In particular, a Transportation Coordinator has been identified to support service deliveries according to patient status at various locations (Figure 17).

**Figure 17: Coordination of Service Access According to Patient Status**



As a result, the majority of service providers *agreed* or *strongly agreed* that MVCCP provided a platform to advocate services for Children with Special Health Care Needs (CSHCN) (Figure 18). The broad impact was reflected by replication of the MVCCP model in three counties, Contra Costa, Monterey, and Orange, as well as dissemination of MVCCP results at an Association of Maternal and Child Health Programs Conference in Washington, D.C. on January 26, 2015.

**Figure 18: Agreement on MVCCP Support for CSHCN**



In summary, child health support is much needed across domains of mental health, dental care, medical service, and parent education. In addition to supporting preventive measures, such as immunizations and health insurance enrollment, First 5 Kern funded treatment services for medically vulnerable children and dental restorative operations. Meanwhile, parents were engaged in *health literacy* and *water safety* education to sustain the program impact on child protection. Accordingly, this section includes triangulation of different data from children (ASQ-3 & DRDP-PS), parents (ECBI & NSCS), service providers (KC\_Dental, HLP, & MVCCP), and preschool teachers (SESBIR) to evaluate program effectiveness. The service tracking and value-added assessment consistently indicated enhancement of service quality under pretest and posttest settings.

## (II) Strengthening of Family Functioning

Novak and Pelaez (2004) reviewed the Piagetian theory on child development and stressed importance of supportive family environments for child growth at ages 0-5. Bowman, Pratt, Rennekamp, and Sektnan (2010) concurred, "Of all the things that influence a child's growth and development, the most critical is reliable, responsive, and sensitive parenting" (p. 2). Therefore, a result statement was adopted by First 5 Kern (2015a) to help all parents and caregivers become "knowledgeable about early childhood development, effective parenting and community services" (p. 10). To achieve this outcome, the Commission set four objectives for service delivery:

1. Direct family support services will be promoted and provided;
2. Parents can access culturally-relevant parenting education;
3. Parents' knowledge of developmental milestones and behavioral norms will be expanded;
4. Domestic violence, child abuse and neglect will be prevented (First 5 Kern, 2015a, p. 10-11).

These objectives have been employed by First 5 Kern to guide distribution of state investment in *Family Functioning* across this funding cycle.

### Overview of Program Alignment with Strategic Planning

First 5 California (2015c) set its priority to “Support sustainability of Family Resource Centers and other community hubs for integrated services for children and families” (p. 1). In FY 2014-15, 12 Family Resource Centers (FRC) were sponsored by First 5 Kern to offer case management and parent education in *Focus Area II: Family Functioning* (Objective 1):

1. Arvin Family Resource Center (AFRC)
2. Buttonwillow Community Resource Center (BCRC)
3. East Kern Family Resource Center (EKFRC)
4. Greenfield School Readiness Program (GSR)
5. Indian Wells Valley Family Resource Center (IWVFRC)
6. Kern River Valley FRC Great Beginnings Program (KRVFRC)
7. Lamont Vineland School Readiness Program (LVSRP)
8. McFarland Family Resource Center (MFRC)
9. Mountain Communities Family Resource Center (MCFRC)
10. Shafter Healthy Start (SHS)
11. Southeast Neighborhood Partnership Family Resource Center (SENP)
12. West Side Community Resource Center (WSCRC)

Meanwhile, four programs were funded in *Focus Area III: Child Development* to support additional FRC services according to their Scope of Work-Evaluation Plan (BCSD, DSR, LHFRC, & NOR). All these FRCs were chosen at central locations of each community to increase service accessibility. Resources from the National Association for the Education of Young Children (NAEYC) have been employed to enrich culturally-relevant parent education (Objective 2). As a result, programs in *Family Functioning* addressed 38 Result Indicators of First 5 Kern’s (2015a) Strategic Plan to enhance parent understanding of developmental milestones and behavioral norms of age-specific children (Objective 3).

Across local communities, Golich (2013) observed that “36% of Kern County children were being raised by a single parent” (p. i). Consequently, “These parents want and need help to learn more positive ways of rearing their children” (Bowman et al., 2010, p. 4). The American Psychological Association (2009) advocated promotion of healthy family functioning as a promising framework for preventing child maltreatments. In accordance with the local need and professional framework, First 5 Kern funded four programs to assist vulnerable children through family-focused support (Objective 4):

1. Domestic Violence Reduction Project (DVRP)
2. Differential Response (DR)
3. Guardianship Caregiver Project (GCP)
4. Women’s Shelter Network (WSN)

In FY 2014-15, DVRP extended legal support and representation to resolve domestic violence cases in court hearings. DR provided intensive home visitations to lower recurrence rates of child abuse and neglect across Kern County. GCP assisted grandparents and caregivers to offer guardianship protection against child neglect,

physical and/or sexual abuse. GCP also supported medical homes, health insurance applications, mental health interventions, dental care, and preschool enrollments. WSN was funded to shelter mothers and children against domestic violence. Comprehensive case management services were offered by WSN for family counseling, group therapy, parent education, and medical or legal support. As a result, these programs have jointly reduced the burden on Child Protective Services (CPS) in foster care facilities.

Depending on child background, restoring nurturing family environments often demanded multilevel supports across FRCs and CPS services (Przeworski, 2013). The local need has led programs to strengthen outreach efforts. For instance, DVRP spread its service sites in Bakersfield, Delano, Frazier Park, Lake Isabella, Lamont/Weedpatch, Shafter, and Taft communities<sup>22</sup>. IWWFRC and MCFRC supported children and families in isolated Indian Wells Valley and Frazier Park regions. SENP served a low-income district in Bakersfield. In addition, DR, IWWFRC, MCFRC, and SENP offered transportation support for 2,168 families to attend early childhood services, center-based learning activities, social service programs, medical or dental treatments, and mental health appointments. When bus passes/vouchers were not available at certain locations, service providers offered direct transportation and/or partnership arrangements to expand program access. In this year, mutual program referrals occurred across 14 service providers in *Family Functioning* for 10,626 children and families.

First 5 Kern funding has been strategically employed to “Establish community-based programs to provide parental education and family support services relevant to effective childhood development” (First 5 Kern, 2015a, p. 2). Due to the variation of family support, parent education outcomes are presented in this section. Another section is created at end of this chapter to aggregate indicators of *Child Development*.

Altogether First 5 Kern funded 16 programs to sustain direct services through FRC and child protective services. In addition, 2-1-1 Kern County received funding to connect families to local programs. The online referrals and/or toll-free phone lines were accessible in either English or Spanish 24 hours a day, 7 days a week. Throughout the year, 2-1-1 Kern County responded to 11,829 queries from families with children ages 0-5, which represented an approximate 14% increase from 10,393 phone calls last year. In particular, phone calls from 1,293 expectant mothers have resulted in linking 79 women to prenatal care and 341 families to FRCs. Referrals were made to support health insurance applications for 127 families. “By 2014, the average number of 2-1-1 referrals per month was upward of 8,400 – an 1,800 percent increase in under two decades” (Medina, 2015, p. 34).

### **Collaboration on Service Delivery across Focus Areas**

In comparison to other counties in California, Kern County has a larger proportion of children in its population (KCNC, 2015). To accommodate various local needs, First 5 Kern funded parent education services on different platforms. Across all FRCs in *Focus Area II*, eight programs offered home-based parent education services for 329 families, six programs provided group-based classes for 245 families, two programs organized in-service workshops for 188 parents, and five programs delivered court-mandated parent education to 106 families (Table 14).

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<sup>22</sup> <http://gbla.org/about-gbla/history/>

**TABLE 14: PARENT EDUCATION AND SUPPORT SERVICES**

Type	Program*
Court-mandated session	EKFRC (21), IWVFRC (33), KRVFRC (9), SENP (35), SHS (8)
Group-based class	AFRC (21), BCRC (26), GSR (92), LVSRP (25), MCFRC (52), WSCRC (29)
Home-based education	AFRC (47), BCRC (5), EKFRC (21), KRVFRC (65), LVSRP (60), MCFRC (29), MFRC (35), WSCDC (16)
Workshop	MCFRC (92), WSCDC (96)

\*Program acronyms are listed in Appendix A. Client counts are in parentheses.

Meanwhile, parent education was supported by additional programs from *Focus Area III: Child Development*. In particular, NOR offered court-mandated parent education for 58 families and DSR provided home-based parent education for 44 families near the Kern County border. Four programs conducted parent education workshops for a total of 589 families (BCSD, BCDC, DDLCCC, & SFP). Six programs hosted group-based parent education sessions for 714 parents (BCSD, BCDC, DSR, LHFRC, NOR, & SSCDC). Besides parent education, all programs in Table 15 had a primary focus on child learning and development, which justified their affiliations in *Focus Area III*.

**TABLE 15: PARENT EDUCATION FROM PROGRAMS IN FOCUS AREA III**

Type	Program*
Court-mandated session	NOR (58)
Group-based class	BCDC (37), BCSD (318), DSR (35), LHFRC (39), NOR (254), SFP (31)
Home-based education	DSR (44)
Workshop	BCDC (152), BCSD (378), DDLCCC (30), SFP (29)

\*Program acronyms are listed in Appendix A. Client counts are in parentheses.

First 5 California (2015a) further noted that “Quality early learning programs also model and support positive parent-child interactions” (p. 6). As a result, five programs in *Family Functioning* provided developmental screening for 520 children (IWVFRC, KRVFRC, MCFRC, SENP, & WSN), including monitoring mental health issues for 68 children in the WSN program. Nine FRCs in *Focus Area II* offered center-based activities to facilitate early development of 406 children (AFRC, BCRC, EKFRC, GSR, LVSRP, MCFRC, MFRC, SHS, & WSCRC). According to First 5 California (2015a), “Developmental screenings and follow up promote healthy cognitive, social-emotional, and physical development” (p. 6).

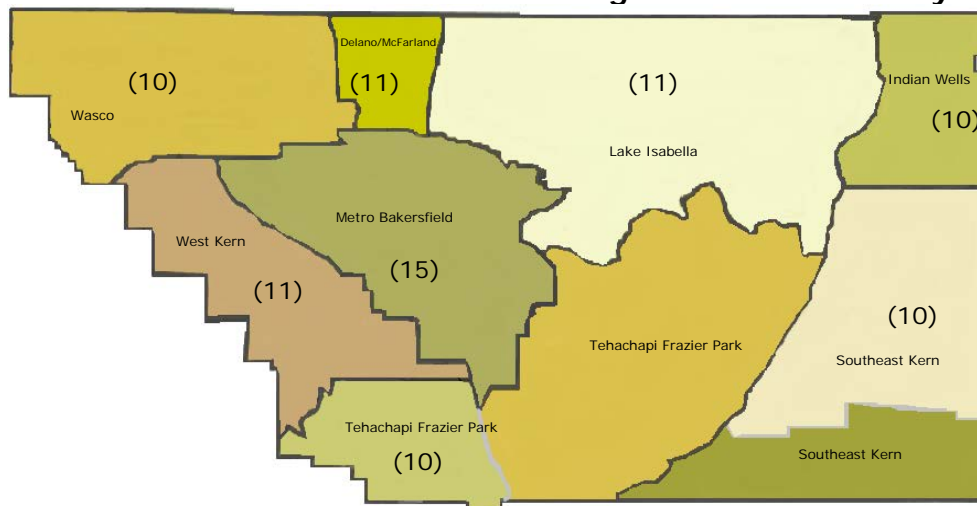
To enhance school readiness, MCFRC supported early learning through preschool scholarships. Summer Bridge services were offered by eight programs to prepare 249 preschoolers and their families for kindergarten transition (AFRC, BCRC, EKFRC, GSR, IWVFRC, LVSRP, SHS, & WSCRC). The child development support was sustained by regular classes at FRCs, such as “*Ready, Set, Go!*”, to incorporate the Houghton Mifflin core curriculum and developmentally-appropriate materials from NAEYC. Meanwhile, 123 home-based preschool and child development activities were organized by five FRCs (AFRC, BCRC, EKFRC, SHS, & WSCRC) to foster child growth in *cognitive, fine motor, language, social emotional, and self-help* domains. Home-based education also introduced E-LAP cards to enhance cognitive, emotional, and physical development of children. The wide-ranging services reconfirmed Thompson and Uyeda’s (2004) observation about FRCs:



Family resource centers have also emerged as a key platform for delivering family support services in an integrated fashion. They serve as “one-stop” community-based hubs that are designed to improve access to integrated information and to provide direct and referral services on site or through community outreach and home visitation. (p. 14)<sup>23</sup>

In planning for delivery of public services, the Kern Council of Governments (KCOG) divided the county map into nine subareas according to local housing development<sup>24</sup>. Due to the mutual program support between parent education and child development, a strong presence of 10 or more service providers has been identified from *Focus Areas II* and *III* to offer parent education programs in each part of Kern County (Figure 19).

**Figure 19: Distribution of Parent Education Programs in Kern County\***



\*Numbers are aggregated across countywide and local programs inside the parentheses

While outreach efforts have been made to strengthen program support in hard-to-reach communities, special service demands were considered to designate 15 programs in Metro Bakersfield based on its higher population density (Figure 19). The internal partnership coordination was enhanced by service referrals between 2-1-1 Kern County at the county level and local service providers at the community level. According to Kumar, Izui, Masataka, and Nishiwaki (2008), “Multilevel redundancy allocation is an especially powerful approach for improving the system reliability” (p. 650). The referral system incorporated reliable resources for local families to access early childhood services in mountain, valley, and desert communities.

### Enhancement of Child Protection through Family Services

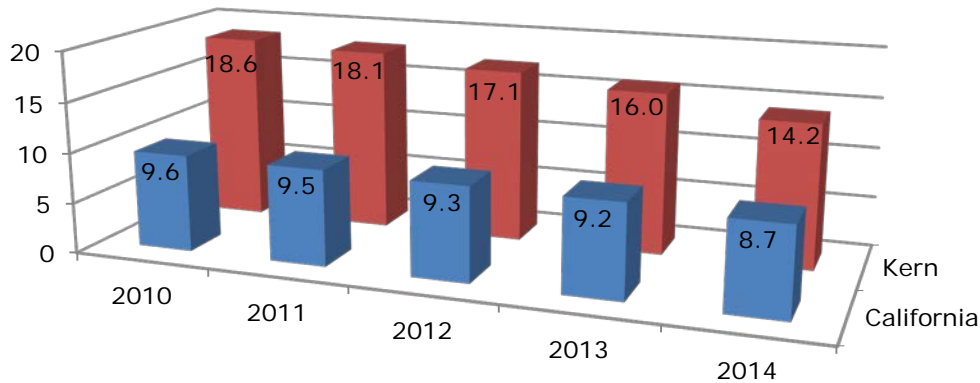
Child protection is an indispensable service to support *Family Functioning*. Palacios and Monticue (2014) noted that “one in seven children born in California—14.8 percent—were reported for suspected abuse or neglect before they were 5-years old” (p. 1). In Kern County, the reported rate reached 22.3%, a level substantially higher than the state

<sup>23</sup> <http://kern.org/kcnc/reportcard/>

<sup>24</sup> [http://www.co.kern.ca.us/planning/pdfs/he/HE2008\\_Ch1.pdf](http://www.co.kern.ca.us/planning/pdfs/he/HE2008_Ch1.pdf)

average. The overall trends of substantiated child abuse rates were depicted at the state and county levels in Figure 20.

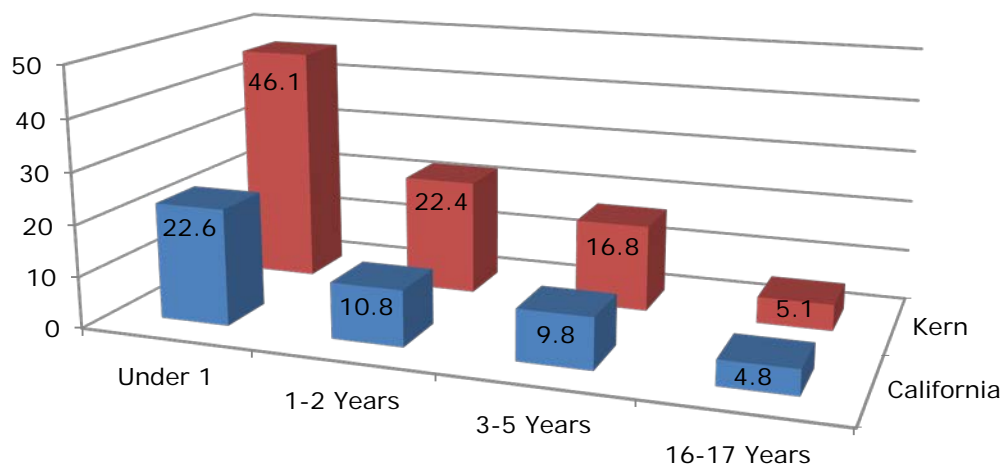
**Figure 20: Substantiated Child Abuse Rates per 1,000 Children\***



Source: 2015 KCNC Report Card.

Despite the concurrent rate decrease in the past five years, the state index drop was within one thousandth according to Figure 20. Meanwhile, the rate in Kern County was decreased from 18.6‰ to 14.2‰, more than four thousandths. Nonetheless, the gap between state and county levels varied across age groups. For children ages 0-5, the rate of child abuse was much larger than a teenage group (Figure 21). To enhance child protection services, DR, DVRP, and GCP case-managed a total of 3,414 families against substantiated child abuse and/or neglect this year. In addition, DVRP, GCP, and WSN case-managed 420 families against child abuse.

**Figure 21: Distribution of Abuse Cases by Age Grouping per 1,000 Children\***



Source: 2015 KCNC Report Card.

## 1. DR Service to Strengthen Child Protection

Throughout the entire year, case managers from Differential Response (DR) met weekly with service supervisors to discuss family assessments, care plans, service delivery strategies, as well as positive and negative factors behind the case development.



Depending on the case needs, “families with screened-in child maltreatment reports may receive either a traditional investigation or an alternative assessment response” (Child Welfare Information Gateway, 2014, p. 1). Supervisor approval was required for case closure to ensure mitigation of risk factors.

To evaluate the program outcome, DR adopted the North Carolina Family Assessment Scale for General Services (NCFAS-G) to monitor improvement of family functioning on eight dimensions, *Environment, Parental Capabilities, Family Interactions, Family Safety, Child Well-being, Social/Community Life, Self-Sufficiency, and Family Health*. The program effectiveness was tracked by pretest and posttest results in FY 2014-15. After data cleaning, the longitudinal records contained over 600 observations of NCFAS-G outcomes. Due to the large sample size, statistical testing has been conducted to examine significance of the DR impact. Table 16 showed significant enhancement of family functioning across all eight domains of NCFAS-G assessment. All effect size values were larger than 0.8 (Table 16). According to Cohen’s (1969) criterion, these indices reconfirmed a strong practical impact of DR case management services.

**TABLE 16: IMPACT OF DR SERVICES ON THE NCFAS-G SCALES**

Scale Domain	Results
Environment	t(606)=17.39, p<.0001; Effect Size=1.41
Parental Capabilities	t(610)=14.78, p<.0001; Effect Size=1.20
Family Interactions	t(606)=16.39, p<.0001; Effect Size=1.33
Family Safety	t(607)=15.30, p<.0001; Effect Size=1.24
Child Well-Being	t(606)=16.53, p<.0001; Effect Size=1.34
Social/Community Life	t(605)=12.78, p<.0001; Effect Size=1.04
Self-Sufficiency	t(605)=17.24, p<.0001; Effect Size=1.40
Family Health	t(607)=14.39, p<.0001; Effect Size=1.17

As the DR provider, “Kern County Network for Children serves many functions benefiting children and families in Kern County.”<sup>25</sup> Its leadership roles are illustrated in six countywide projects (Table 17). The capacity building also created extensive partnerships with nine county agencies, 15 community-based organizations, 21 family resource centers, and five funders of local child services<sup>26</sup>.

**TABLE 17: DR ROLES IN STRENGTHENING FAMILY FUNCTIONING**

Roles	Projects
Administrative and Fiscal Agent	Promoting Safe and Stable Families
Administrative and Fiscal Agent	Child Abuse Prevention, Intervention, and Treatment
Administrative and Fiscal Agent	Community Based Child Abuse Prevention
Administrative and Fiscal Agent	Kern County Children’s Trust Fund
Administrative Agent	Foster Youth Services Program/AB490 Liaison Activities
Administrative Agent	County Accreditation of Local Community Collaborative

<sup>25</sup> <http://kern.org/kcnc/about/>

<sup>26</sup> <http://kern.org/kcnc/links/>

In summary, effectiveness of DR services has been reflected in the enhancement of family functioning on eight dimensions of NCFAS-G assessment. The service was extensive, involving more than 600 families and 45 partners at county and community levels. With First 5 Kern funding, DR leveraged over 70% of its annual budget to sustain Child Protective Services (CPS) in Kern County.

## 2. DVRP Support to Reduce Domestic Violence

Based on the state law, children's witness of domestic violence is considered as child abuse (California Penal Code §1170.76).<sup>27</sup> Thus, direct child protection must include program support against domestic violence. Past research indicated that "the development of a child's brain can literally be altered by domestic violence experiences, resulting in negative impacts on the child's physical, cognitive, emotional, and social growth" (¶. 2).<sup>28</sup>

In partnership with a non-profit organization, Greater Bakersfield Legal Assistance (GBLA), First 5 Kern funded the Domestic Violence Reduction Project (DVRP) to provide a full range of legal assistance for child protection. Since 1968, GBLA has offered free legal services in civil matters to low-income residents in Kern County.<sup>29</sup> Upon a case identification, DVRP assigned a supervising attorney and two paralegals to examine the issue of child exposure to domestic violence. Feasible plans were developed to protect children and other victims with *substantiated abuse* experiences. Weekly meetings were held to monitor case developments. The service also included interpretation support for clients in 21 languages.<sup>30</sup>

Herrenkohl et al. (2008) pointed out, "Children subjected to child abuse are often exposed to other forms of risk, including co-occurring exposure to domestic violence (DV)" (p. 84). Hence, DV victims, including young children, need assistance to access comprehensive support, such as health care, safe housing, education and food. DVRP services fostered stability of childcare in an environment free from abuse and neglect.

## 3. GCP Services for Child Protection

Children's Data Network (2014) reported, "When children are followed from birth through age 5, we see that the cumulative rate of children who are born in the state and are later involved with the child protective system is roughly triple annual rates of children reported for maltreatment, confirmed as a victim of maltreatment and placed in foster care" (p. 1). To reduce the system burden, Guardianship Caregiver Project (GCP) offered help to eligible grandparents and other caregivers seeking a legal guardianship over children ages 0–5. This protection service ensured child access to vital support, such as medical care and education. Case management services included six aspects<sup>31</sup>:

1. Counsel and advice with an attorney;
2. Explanation of rights, duties, and obligations of a guardian;
3. Assistance with completion of guardianship court documents;

<sup>27</sup> <http://law.onecle.com/california/penal/1170.76.html>

<sup>28</sup> <http://gbla.org/services/domestic-violence/domestic-violence-reduction-project/>

<sup>29</sup> <http://gbla.org/>

<sup>30</sup> <http://gbla.org/about-gbla/history/>

<sup>31</sup> <http://gbla.org/services/guardianship/grandparent-guardianship/>

4. Training for self-representation with court cases;
5. Direct representation and court appearances by an attorney;
6. Information referral, as appropriate.

Cases remained open until all legal issues were settled and children received continuity of care in a protective environment.

#### **4. WSN Support for Early Childhood Services**

To reduce victimization in the aftermath of domestic violence, young children were provided with a network of services from Women's Shelter Network (WSN) to receive mental health interventions and behavior modifications that were intended to break the cycle of violence in their future lives. The program was also designed to increase awareness of the public against domestic violence, sexual assault, and child abuse. WSN employed the Ages and Stages Questionnaire-Social Emotional (ASQ-SE) to track alleviation of emotional difficulties among children ages 0-5. Last year, the ASQ-SE scale showed five children at an average of 12<sup>th</sup> point above the at-risk threshold (ART) in 36<sup>th</sup> month. This year, the performance gap was reduced to 0.17 above ART in 48<sup>th</sup> month.

In summary, First 5 Kern funded comprehensive services to enhance child protection. When domestic violence occurred, options were provided to accommodate children through CPS with DR, guardianship care in GCP, and a shelter setting at WSN. DR offered comprehensive services to examine family circumstances, report credibility, and child needs for immediate foster care support. GCP assisted grandparents or other guardians to establish custody for children through a legal process. WSN provided a shelter environment for women and children to access counseling, food, emergency transportation, and referrals. While DR, GCP, and WSN handled cases of *substantiated child abuse* in multiple ways, DVRP added more legal services to protect children beyond the level of family intervention.

#### **Improvement of Nurturing Parenting Outcomes**

In the 21<sup>st</sup> century, rapid expansion of digital technology has changed childrearing practice. Based on a national survey, Marcus (2015) reported that "Three out of four parents doled out a mobile device when doing chores and to keep children calm when they were out in public places, and while running errands" (p. 2). Digital equipment used to be available within rich families (Keniston & Kumar, 2003). More recently, Maltais (2015) found its universal access by children in low-income, minority communities. In Kern County, annual income for childrearing families was nearly \$20,000 below the state average. Hence, program supports were needed to strengthen nurturing parenting practice against the negative technology impact on child neglect.

To conform to professional practice, 21 programs received First 5 Kern funding to implement a Nurturing Parenting Curriculum (NPC) in parent education (Table 18). According to Bavolek (2002), "The Nurturing Parenting Programs are validated, family-centered programs designed to build nurturing skills as alternatives to abusive parenting and child rearing attitudes and practices" (p. 1). Across *Focus Areas II* and *III*, 10 programs used NPC in home-based parent education, 12 programs adopted it in group-based parent education, six programs utilized it in court-mandated parent education, and five programs employed it to design parent workshops.

**TABLE 18: ALIGNMENT OF PARENT EDUCATION WITH NPC IN FOCUS AREAS II & III \***

Type	Focus Area II	Focus Area III
Court-mandated session	EKFRC, IWVFRC, KRVFRC, SHS, SENP	NOR
Group-based class	AFRC, BCRC, GSR, LVSRP, MFRC, WSCRC	BCSD, DSR, BCDC LHFRC, NOR, SSCDC
Home-based education	AFRC, BCRC, EKFRC, KRVFRC, LVSRP MCFRC, MFRC, RSNC, WSCRC	DSR
Workshop	MCFRC, RSNC, WSCRC	BCSD, SFP

\*Program acronyms are listed in Appendix A.

Moreover, seven out of 10 programs in *Focus Area III*, including four FRCs, provided parent education and three programs (i.e., BCSD, DSR, & NOR) adopted NPC on multiple platforms. All 12 FRCs from *Focus Area II* offered parent education and nine programs served on more than one platform (AFRC, BCRC, EKFRC, KRVFRC, LVSRP, MCFRC, MFRC, RSNC, & WSCRC). In FY 2014-15, the Nurturing Skills Competency Scale (NSCS) was employed to assess effectiveness of *group-based* and *home-based* parent education under a pretest and posttest setting.

Following the NSCS structure, assessment results were classified into Parts A and B to differentiate developments of nurturing parenting *knowledge* and *application*, respectively. Table 19 showed significant improvement of parenting knowledge across five programs in *Focus Area II: Family Functioning* and *Focus Area III: Child Development*. The effect size results were larger than 0.8, suggesting a strong practical impact on parenting knowledge development.

**TABLE 19: IMPROVEMENT OF PARENTING KNOWLEDGE IN FOCUS AREAS II & III**

Focus Area	Program*	Result	
Family Functioning	AFRC	t(16)=6.25, p<.0001;	Effect Size=3.13
	GSR	t(48)=4.99, p<.0001;	Effect Size=1.44
	MFRC	t(36)=2.97, p=.0052;	Effect Size=0.99
	WSCRC	t(17)=12.45, p<.0001;	Effect Size=6.04
Child Development	LHFRC	t(35)=5.90, p<.0001;	Effect Size=1.99

\*Program acronyms are listed in Appendix A.

The NSCS further indicated significant improvement of parenting skills across three programs in *Family Functioning* (Table 20). Although no program in *Child Development* demonstrated significant improvement on parenting skills, Delano School Readiness (DSR) showed moderate impact on parent knowledge (effect size=0.70) and skill (effect size=0.71) improvements this year.

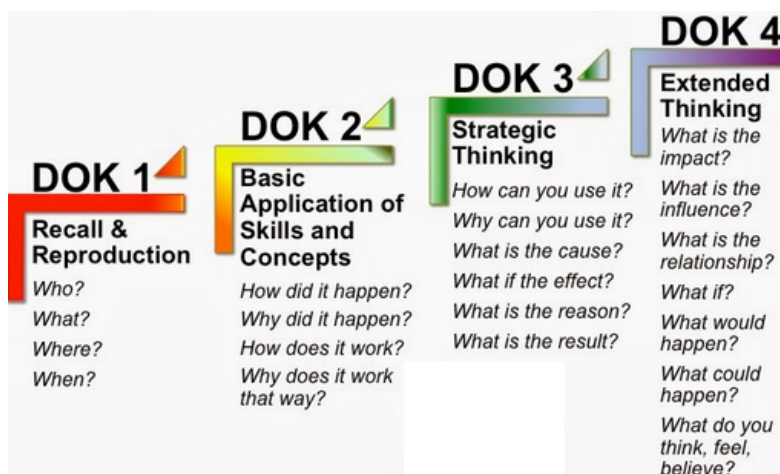
**TABLE 20: IMPROVEMENT OF PARENTING SKILLS IN FAMILY FUNCTIONING**

Focus Area	Program*	Result	
Family Functioning	BCRC	t(32)=3.52, p=.0013;	Effect Size=1.24
	GSR	t(48)=3.49, p=.0010;	Effect Size=1.01
	WSCRC	t(17)=12.45, p<.0001;	Effect Size=6.43

\*Program acronyms are listed in Appendix A.

Webb (1997) developed a system for classifying learning outcomes (Figure 22). According to that model, skill development was ranked above knowledge recall (Camp, 2015), which supported the results of observing more program participants with knowledge improvement (Table 19) and fewer programs attaining the level of significant skill enhancement (Table 20).

**Figure 22: Webb's Taxonomy on Depth of Knowledge (DOK)**



It was worth noting that WSCRC incorporated NPC in both home-based and group-based parent education, as well as in-service parent workshops (see Table 18). According to the NPC developers,

The ineffectiveness of the parenting education being offered to the parents, which includes: a) the dosage (number of total lessons offered are inadequate to the level of parental need); b) the intensity of the dosage (classes are condensed into a short period of time not allowing the information time to incubate into normal parenting patterns); or c) parenting lessons that do not meet the needs of the parents. That is, program focused lessons not parent focused lessons. (Assessing Parenting, 2012, p. 1)

The strong dosage impacts from the WSCRC program have been reflected in significant improvement of parenting knowledge and skills in Tables 19 and 20.

As a criterion-referenced instrument, NSCS has already been adopted by six other county commissions for at least 10 years<sup>32</sup>. When First 5 Kern introduced this assessment tool in this funding cycle, program features have been approved by the commission from the Request for Proposal (RFP) process. Thus, it was too late to implement the NPC training to enhance program alignment with NSCS assessment. In sister commissions, "agencies countywide have received 3-days of training on the Nurturing Parenting curriculum [NPC] to be able to utilize the program in their service delivery with families through groups, home visits, or individual counseling" (Ferron & Jordan, 2012, p. 3). That approach has facilitated delivery of parent-focused lessons in other counties (Assessing Parenting, 2012), and can be borrowed by First 5 Kern to support improvement of NSCS outcomes in most programs.

<sup>32</sup> These counties are Butte, Lake, Madera, San Mateo, Tehama, and Tuolumne.

### Establishment of Parenting Beliefs against Child Maltreatment

Samuelson (2010) noted, “Effective parent education programs have been linked with decreased rates of child abuse and neglect, better physical, cognitive and emotional development in children, increased parental knowledge of child development and parenting skills” (p. 1). With First 5 Kern funding, court-mandated parent education was offered by six programs to promote changes of parent belief according to the positive norms for nurturing parenting. Researchers identified a norm-referenced Adult-Adolescent Parenting Inventory-2 (AAPI-2) to assess the program impact on psychological constructs that negatively undermined parent-child interactions (Berg, 2011; Moore & Clement, 1998). AAPI-2 incorporated assessment of five parent beliefs pertaining to child maltreatment:

- A. Inappropriate developmental expectations of children
- B. Lack of parental empathy toward children’s needs
- C. Strong parental belief in the use of physical punishment
- D. Reversing parent-child family roles
- E. Oppressing children’s power and independence

The instrument was recommended by California Evidence-Based Clearinghouse for Child Welfare (2014). Besides First 5 Kern, at least nine other First 5 county commissions employed AAPI-2 to evaluate effectiveness of parent education<sup>33</sup>.

Bocanegra (2014) pointed out, “A critical factor in buffering children from the effects of toxic stress and adverse childhood experiences is the existence of supportive, stable relationships between children and their families, caregivers, and other important adults in their lives” (p. 3). Hence, reverse of these negative beliefs is crucial in early childhood support. In FY 2014-15, 160 parents were tracked in five programs during court-mandated parent education services. Four cases were excluded per IRB rule on consent form administration. Table 21 showed significant improvement on *parental empathy toward children’s need* in five programs (see Construct B). Except for a program with a small sample size (N=8), all four programs also demonstrated significant improvements on *appropriate developmental expectations*, *discouraging physical punishment*, and *reversing parent-child roles* (see Constructs A, C, & D in Table 21). Perhaps because children ages 0-5 were too young to assume power and independence, only 82% of the parents demonstrated significant improvement on Construct E. Consequently, the impacts at two program sites (KRVFRC & EKFC) were insignificant on this construct (Table 21).

In comparison to NSCS results in Tables 19 and 20, court-mandated parent education indicated more consistent improvements across programs (Table 21). Effect size values in Table 21 also surpassed a threshold of 0.8, suggesting strong practical impacts in the AAPI-2 outcomes. In addition, the number of parents that have been tracked in these court-mandated education sessions increased from 124 in last year to 156 this year across *Focus Areas II* and *III*. Unlike other center-based services, court-mandated parent education did not occur voluntarily and the classes were strictly structured to abide by the legal requirement. Hence, the mandatory service played an

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<sup>33</sup> These nine other counties are Los Angeles, Madera, Sacramento, San Bernardino, Santa Barbara, Santa Cruz, Solano, Shasta, and Tuolumne.



indispensable role in improving parenting attitudes. In this regard, the AAPI-2 findings confirmed compliance of First 5 Kern funding with a state stipulation to address “Parental education and support services in all areas required for, and relevant to, informed and healthy parenting” (Proposition 10, p. 7).

**TABLE 21: IMPACT OF COURT-MANDATED PARENT EDUCATION IN FOCUS AREAS II & III**

Construct	Focus Area	Program*	Result
A. Expectations of Children	II	EKFRC	t(20)=3.33, p=.0033; Effect Size=1.49
		IWVFRC	t(39)=6.49, p<.0001; Effect Size=2.08
		SENP	t(16)=6.10, p<.0001; Effect Size=3.26
	III	NOR	t(71)=6.31, p<.0001; Effect Size=1.50
B. Parental Empathy	II	EKFRC	t(20)=5.35, p<.0001; Effect Size=2.39
		IWVFRC	t(39)=11.66, p<.0001; Effect Size=3.74
		KRVFRC	t(7)=3.76, p=.0071; Effect Size=2.84
		SENP	t(16)=8.17, p<.0001; Effect Size=4.37
	III	NOR	t(71)=11.23, p<.0001; Effect Size=2.67
C. Physical Punishment	II	EKFRC	t(20)=2.54, p=.0196; Effect Size=1.14
		IWVFRC	t(39)=10.62, p<.0001; Effect Size=3.40
		SENP	t(16)=6.83, p<.0001; Effect Size=3.65
	III	NOR	t(71)=9.01, p<.0001; Effect Size=2.14
D. Parent-Child Roles	II	EKFRC	t(20)=3.19, p=.0046; Effect Size=1.43
		IWVFRC	t(39)=8.61, p<.0001; Effect Size=2.78
		SENP	t(16)=6.13, p<.0001; Effect Size=3.28
	III	NOR	t(71)=10.51, p<.0001; Effect Size=2.49
E. Child Power & Independence	II	IWVFRC	t(39)=4.28, p=.0001; Effect Size=1.37
		SENP	t(16)=2.96, p=.0104; Effect Size=1.59
	III	NOR	t(71)=6.67, p<.0001; Effect Size=1.58

\*Program acronyms are listed in Appendix A.

To facilitate service improvement in parent education, First 5 Kern distributed *Kit for New Parents* that contained various resources from prenatal care to quality preschool. “This award-winning Kit includes an educational DVD, Advice for New Parents reference book, Puppy and Friends touch-and-feel board book, and much more. Kits are available in English, Spanish, Cantonese, Korean, Mandarin and Vietnamese”<sup>34</sup>. Following the commission leadership, arrangements of case management have been made at the program level to support *home-based parent education* across the county. *Group-based parent education* was delivered through community meetings and/or regular course enrollments. Video discussions and guest speakers were accommodated to address special issues of infant care, child growth, brain development, family bonding, and temperament variation. *In-service workshops* were more thematic-based, covering self-contained topics, such as food nutrition, child protection, and parenting strategy. *Court-mandated parent education* was designed to fulfill legal requirements for improvement of

<sup>34</sup> <http://first5kern.org/wp-content/uploads/sites/21/2015/02/Handprints-Fall-Winter-2014.pdf>



family functioning. Altogether, First 5 Kern has partnered with various service providers to strengthen parent education in Kern County.

Beyond the internal collaboration, service providers accomplished external fundraising to leverage \$1,855,084 from 15 organizations (Table 22). The money was employed to augment Proposition 10 funding for program capacity building.

**TABLE 22: FUND LEVERAGE IN FOCUS AREA II: FAMILY FUNCTIONING**

Program*	Additional Sources of Funding	Amount
2-1-1 Kern County	County of Kern, U.S. Department of Agriculture, U.S. Department of Health and Human Services and United Way	\$401,335
AFRC	California Endowment and Covered California	\$5,020
BCRC	Donations and Foundation	\$2,805
DR	County of Kern	\$560,000
EKFRC	Corporate Donation	\$1,500
GCP	Kern County Aging & Adult Services	\$33,329
GSR	Covered California	\$3,828
IWVFRC	Fundraiser, County of Kern, Fees/Tuition, Targeted Case Management	\$53,903
KRVFRC	California Department of Education, County of Kern, Donation and USDA California Nutrition Network	\$196,740
MCFRC	Covered California, Donations and Southwest Healthcare District	\$41,644
MFRC	Donations, Medical Administrative Activities and United Way	\$135,528
SENP	Fees/Tuition, Nurturing Infant Awareness & Targeted Case Management	\$155,482
SHS	Donation	\$1,000
WSCRC	Dignity Health, Donations and Salvation Army	\$60,000
WSN	Federal/California Emergency Management Agency, Peck Foundation, Donation, Fundraisers and United Way	\$202,970

\*Program acronyms are listed in Appendix A.

In conclusion, First 5 Kern (2015a) highlighted two components of *Family Functioning* in its Strategic Plan, *Parent Education* and *Support Services* (Table 3). While *parent education* was sponsored by more than a dozen programs in *Focus Areas II* and *III*, *support services* were provided for child protection against domestic violence and other issues of child abuse or neglect. Through program referrals from 2-1-1 Kern County and service providers, First 5 Kern supported enhancement of family functioning to ensure that “All parents and caregivers will be knowledgeable about early childhood development, effective parenting and community services” (First 5 Kern, 2015a, p. 5).

### (III) Enhancement of Early Childhood Education

Since 1998, Proposition 10 stipulated that “Revenues generated from the tobacco tax must be used to enhance the early growth experiences of children, enabling them to be more successful in school and ultimately to give them an equal opportunity to succeed

in life”<sup>35</sup>. The state statute guided First 5 California to designate a focus area on *Child Development*. At the county level, First 5 Kern (2015a) specified *Early Childcare and Education* to align local program funding with the state guideline (Table 3). Over the past five years, three programs were funded to support *Early Childcare* for families with special needs:

Blanton Child Development Center (BCDC)  
Discovery Depot Licensed Child Care Center (DDLCCC)  
Small Steps Child Development Center (SSCDC)

To ensure that “Quality early childcare and education services will be accessible” (First 5 Kern, 2015a, p. 5), the *Early Education* component included preschool support and school readiness programs to prepare children for kindergarten transition:

Preschool

South Fork Preschool (SFP)  
Wind in the Willows Preschool (WIW)

School Readiness

BCSD School Readiness (BCSD)  
Delano School Readiness (DSR)  
Lost Hills Family Resource Center (LHFRC)  
Neighborhood Place Parent Community Learning Center (NOR)  
Ready to Start (R2S)

In combination, First 5 Kern funding has addressed three objectives of its Strategic Plan in *Child Development*: (1) School readiness programs supported the partnership of parents as first teachers, (2) Preschool programs expanded quality and affordable early childhood education and childcare services in remote communities, (3) BCDC, DDLCCC, and SSCDC enhanced the support for children with special needs (First 5 Kern, 2015a).

Liu (2014) asserted that “The most effective way to help babies and toddlers is to promote positive parent-child relationships” (p. 3). Hence, school readiness programs not only provided learning opportunities for children in Summer Bridge settings, but also offered parent education through center-based and/or home-based services. Outcomes from NSCS and AAPI-2 assessments were reported in the previous section to assess effectiveness of parent education. Due to the overlap of program coverage across focus areas, several FRCs in *Family Functioning* also contributed services in *Child Development*. This section is devoted to assessment of the program impact on *Early Childcare and Education* across focus areas.

### **Child Development Services in Focus Areas II and III**

In FY 2014-15, First 5 Kern sponsored 10 programs in *Child Development*. Depending on local needs, service providers supported early childcare and education on several platforms, including curriculum-based Summer Bridge training, center-based child development, home-based child education, and individually-focused case management services. While these services have been advocated by professional organizations (see

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<sup>35</sup> <http://first5association.org/overview-of-proposition-10/>

Hirsh, 2013), "There is a further compelling need in California to ensure that early childhood development programs and services are universally and continuously available for children until the beginning of kindergarten" (Proposition 10, p. 1).

Service deliveries at the program level were indicated by unduplicated client counts inside parentheses of Table 23. All 10 programs in *Child Development* offered center-based services for children ages 0-5. The total number of participants increased from 675 in last year to 763 this year. Three programs provided home-based child education for 71 families. Four programs took part in Summer Bridge (SB) education to serve 773 children. Because BCSD was the largest elementary school district in California and R2S served multiple districts in Kern County, the child count in *Focus Area III* was more than the total number of SB participants in *Focus Area II*.

**TABLE 23: SERVICES IN CHILD DEVELOPMENT ACROSS FOCUS AREAS II & III \***

Service	Focus Area II	Focus Area III
Summer Bridge	AFRC (27), BCRC (31), EKFC (13), GSR (39), IWWFC (19), LVSRP (50), MFRC (24), SHS (25), WSCRC (45)	BCSD (174), DSR (31), LHFC (18), R2S (550)
Center-Based Child Development	AFRC (26), BCRC (25), EKFC (30), GSR (131), LVSRP (42), MFCRC (21), MFRC (43), SHS (50), WSCRC (38)	BCSD (179), BCDC (39), DSR (32), DDLCCC (63), LHFC (25), NOR (309), SFP (30), SSCDC (45), WIW (41)
Home-Based Child Education	AFRC (28), BCRC (16), EKFC (39), SHS (23), WSCRC (27)	BCSD (31), DSR (20), LHFC (20)
Case Management	AFRC (49), BCRC (20), EKFC (30), GSR (33), IWWFC (61), KRVFC (199), LVSRP (64), MFCRC (28), MFRC (58), SHS (51), SENP (113), WSCRC (30), WSN (46)	BCSD (142), BCDC (37), DSR (25), LHFC (20)

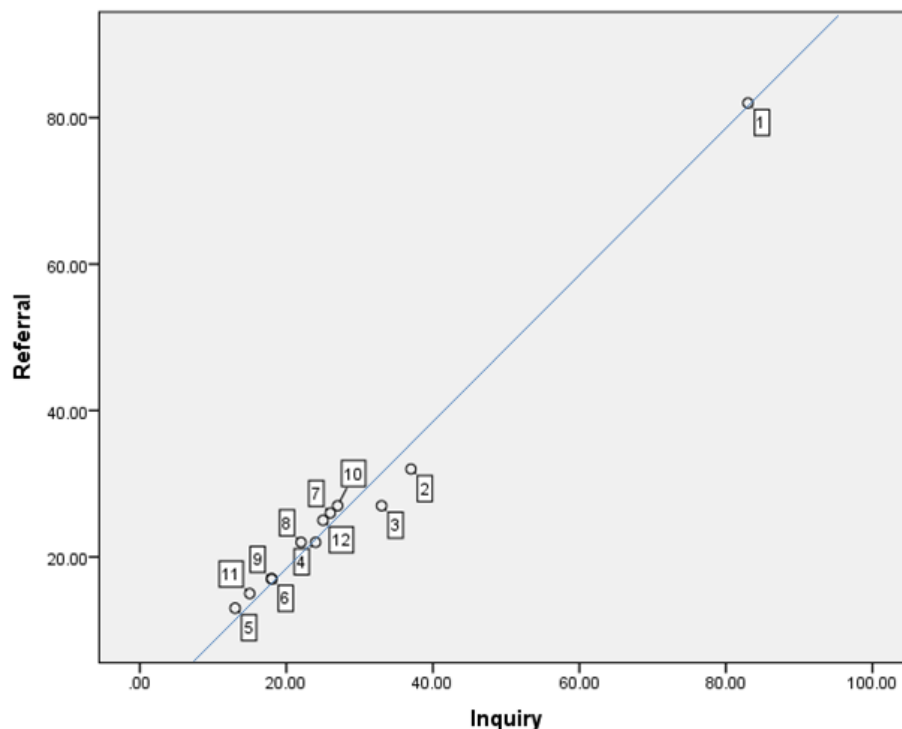
\*Program acronyms are listed in Appendix A. Service counts are in parentheses.

Meanwhile, nine programs in *Family Functioning* offered SB services for 273 children this year, an increase from 247 children last year. In addition, nine programs expanded center-based services for 406 children, above the original capacity of 386 children from last year. Home-based education also expanded in five programs to accommodate 133 children in *Focus Area II*. Case management services occurred for 1,007 children in 17 programs across *Focus Areas II* and *III* to address special service needs at the individual level (Table 23).

More importantly, concerted effort has been made in the service delivery across programs in *Focus Area III*. To support children in remote communities, SFP offered transportation for 13 children this year. BCDC served a special group of children whose parents were teenage dropouts from high school. The support allowed teen parents to attend Court, Community and Charter Schools. DDLCCC offered quality daycare for children whose parents resided at the Bakersfield Homeless Center. This service gave parents a chance to re-establish stable homes through education and community support. SSCDC served infants and preschoolers whose parents were case-managed for domestic violence. A total of 22,080 nutritional services were provided by DDLCCC and SSCDC during breakfast, lunch, and snack time.

“There is currently movement internationally towards the integration of services for young children and their families, incorporating childcare, education, health and family support” (Nichols & Jurvansuu, 2008, p. 117). Service integration was enhanced by referrals from 2-1-1 Kern County to facilitate program access. In this year, 2-1-1 Kern County tracked 341 cases and 325 referrals have been made to establish the FRC connections (Figure 23). The service backlog was quickly reduced according to the trend plot. In the first month, more than 80 callers requested the referral support. The number dropped a level under 40 during the remaining months (Figure 23). The trend across 12 months showed a correlation of 0.99 to confirm the link between referral counts and the number of phone calls.

**Figure 23: Pattern of FRC Referrals across 12 Months in FY 2014-15**



Note: Numeric numbers are used track the month sequence in the fiscal year.

Proposition 10 indicated a strong need to support “the informed selection of child care” (p. 5). In FY 2014-15, 2-1-1 Kern County responded to 6,263 unduplicated callers with children ages 0-5. Meanwhile, service providers in *Focus Area 3: Child Development* made 480 referrals at the program level, a sharp increase from 231 referrals last year. While 2-1-1 Kern County provided center-based services for the entire county, peer referrals at the program level were deeply grounded on accurate understanding of client needs within local communities. The multilevel referral system allowed local families to triangulate the referral information from Helpline 2-1-1 and local service providers, and thus, make an informed decision to support early childhood development at both county and community levels.

“Early this year, 2-1-1 Kern received national accreditation from the Alliance of Information and Referral Systems” (Medina, 2015, p. 34). As a county agency, the Community Action Partnership of Kern (CAPK) was designated by the California Public

Utilities Commission to manage 2-1-1 phone calls for Kern County. Medina (2015) recollected that “referral call volume in 2014 exceeded 100,000, with the top numbers of referral being for food, housing, utilities, clothing and household needs assistance” (p. 34). Nearly 12,000 callers request support for children ages 0-5 this year.

In summary, First 5 Kern has created “a seamless system of integrated and comprehensive programs and services” (Proposition 10, p. 2). Nine programs were task-focused, such as Summer Bridge (R2S & IVWFRC) or center-based child development (BCDC, DDLCCC, MCFRC, NOR, SFP, SSCDC, & WIW). Other programs were engaged in multiple services for children in different settings. Task-focused programs like SFP adopted a systematic approach to offer preschool education, referral, and transportation services. Based on the result aggregation, evidence of service delivery has been substantiated to “ensure that children enter kindergarten physically, mentally, emotionally and cognitively ready to learn” (First 5 Kern, 2015a, p. 2).

### Assessment Outcomes from Early Childhood Education

While service counts in the previous section indicated the scope of service delivery to support child development, Albert Einstein cautioned that “not everything that counts can be counted”.<sup>36</sup> To track improvement of program performance, pretest and posttest data have been gathered from several assessment instruments, including Ages and Stages Questionnaire-3 (ASQ-3), Child Assessment-Summer Bridge (CASB), Desired Results Developmental Profile–Infant/Toddler (DRDP-IT), and Desired Results Developmental Profile–Preschool (DRDP-PS). Additional information was collected from School Readiness Articulation Survey (SRAS) from education stakeholders. Instrument features are listed in Table 24 according to the population definition.

**TABLE 24: INSTRUMENTS FOR DATA COLLECTIONS IN FOCUS AREAS II & III**

Instrument	Feature	Population
ASQ-3	Age-appropriate measures to assess child development in <i>Communication, Gross Motor, Fine Motor, Personal-Social, and Problem Solving</i> domains.	Ages 0-5
CASB	Value-added assessment in child <i>Communication, Cognitive, Self-Help, Social Emotional</i> and <i>Motor</i> skills.	Ages 4-5
DRDP-IT	Indicators of <i>Self and Social Development, Language and Literacy Development, Cognitive Development, Motor and Perceptual Development, and Health</i> .	Infant or Toddler
DRDP-PS	Indicators of <i>Self and Social Development, Language and Literacy Development, English Language/Cognitive/Math/Physical Development, and Health</i> .	Preschooler
SRAS	Survey of indirect responses from adults on quality of early childhood education for kindergarten entry.	Education Stakeholders

#### 1. ASQ-3 Findings

ASQ-3 outcomes covered a broad range of child growth in *Communication, General Motor, Fine Motor, Personal-Social, and Problem Solving* domains. Among programs funded by First 5 Kern, 20 service providers tracked child growth against age-specific

<sup>36</sup> [www.quotationspage.com/quote/26950.html](http://www.quotationspage.com/quote/26950.html)

thresholds for 1,708 children during Months 2-60. ASQ-3 findings from three programs in *Child Health* were reported in the first section of this chapter. For the remaining programs in *Focus Areas II: Family Functioning* and *Focus Areas III: Child Development*, ASQ-3 data were collected from a total of 1,561 children in Table 25.

**TABLE 25: SCOPE OF ASQ-3 DATA COLLECTION IN FOCUS AREAS II & III**

Focus Area	Program*	Months	Sample Size
II	AFRC	2-60	69
	BCRC	2-60	81
	EKFRC	2-60	142
	GSR	2-60	127
	IWVFRC	2-60	50
	KRVFRC	2-60	130
	LVS RP	2-54	27
	MC FRC	2-60	75
	MFRC	33-60	80
	SE NP	2-60	75
	SHS	48-60	101
	WSCRC	6-60	33
	WSN	2-60	56
III	BCSD	2-60	337
	DSR	36-60	9
	LHFRC	18-60	46
	NOR	2-60	216

\*Program acronyms are listed in Appendix A.

Except for two results in the *Fine Motor* category, Table 26 showed 80% or more children surpassing ASQ-3 thresholds in *Communication* (COM), *Gross Motor* (GM), *Fine Motor* (FM), *Personal-Social* (PerS), and *Problem Solving* (ProS) domains. Multiple programs demonstrated that 100% of the children performed above the thresholds in COM, GM, PerS, and ProS columns (see Table 26). In addition, 61% or more children also showed satisfactory FM development above the age-specific thresholds.

**TABLE 26: PERCENT OF CHILDREN WITH PERFORMANCE LEVEL ABOVE ASQ THRESHOLD**

Focus Area	Program	COM	GM	FM	PerS	ProS
II	AFRC	94	90	83	95	95
	BCRC	98	97	81	98	98
	EKFRC	91	89	84	94	91
	GSR	98	95	94	96	96
	IWVFRC	98	98	92	100	100
	KRVFRC	95	80	85	95	97
	LVS RP	96	81	56	93	89
	MC FRC	96	88	82	96	97
	MFRC	94	89	80	94	91
	SE NP	97	95	93	95	97
	SHS	96	90	80	96	90
	WSCRC	97	94	61	97	85
	WSN	98	84	89	95	96
III	BCSD	98	90	83	95	95
	DSR	100	100	89	100	100
	LHFRC	100	100	89	98	100
	NOR	92	88	70	92	94



"Many experts think that difficulties in fine motor skills (e.g., managing the fingers and wrist) are a reflection more of malfunctioning in the proximal areas of the upper limbs than of malfunctioning in other areas" (Nelson, 2015, p. 2). With exception of two programs, FM was the category that had a relatively lower percent in Table 26. The result supported incorporation of more child development activities to practice control of small muscles that were directly linked to improvement of FM skills.

Beyond the percent description, statistical testing has been conducted to examine whether the level of child development was significantly above the corresponding ASQ-3 thresholds. Program data were aggregated to track the gaps between child performance and age-specific thresholds. The test statistic from a single sample t test was listed in Table 27. Except for the DSR results in the COM domain, all t values in Table 27 were significant at  $\alpha=.005$ .

**TABLE 27: TEST STATISTIC (T) FOR SIGNIFICANT RESULTS IN SEVENTEEN PROGRAMS**

Focus Area	Program*	COM	GM	FM	PerS	ProS
II	AFRC	22.10	21.44	26.49	21.57	22.88
	BCRC	21.40	23.73	25.37	19.09	20.25
	EKFRC	22.35	19.85	22.25	18.46	22.00
	GSR	23.16	21.26	27.85	21.49	21.29
	IWVFRC	26.05	23.80	22.86	23.41	23.59
	KRVFRC	22.71	19.72	21.40	19.63	21.40
	LVS RP	17.04	16.62	15.33	10.99	15.90
	MCFRC	22.11	22.00	23.70	21.32	20.11
	MFRC	16.83	21.64	22.49	16.42	18.80
	SENP	28.84	23.51	23.89	22.88	23.70
	SHS	18.17	20.36	23.68	11.36	21.48
	WSCRC	20.56	19.54	17.51	12.53	20.04
	WSN	22.44	18.35	21.07	19.55	19.20
III	BCSD	23.66	21.40	26.05	21.08	21.65
	DSR	6.00	22.33	25.54	12.61	12.19
	LHFRC	28.75	24.01	28.14	21.15	26.91
	NOR	21.91	18.80	18.30	18.53	19.27

\*Program acronyms are listed in Appendix A.

In part, a small sample size for DSR (i.e., N=9 in Table 25) could have contributed to the insignificant result. The American Psychological Association (2001) suggested that "For the reader to fully understand the importance of your findings, it is almost always necessary to include some index of effect size or strength of relationship in your Results section" (p. 25). The effect size computing revealed a strong practical impact on all ASQ-3 indicators across 17 programs. The smallest value for BCSD was 2.36, much larger than the 0.8 threshold for strong practical impact (see Cohen, 1988).

In summary, child developments in *Communication*, *Gross Motor*, *Fine Motor*, *Personal-Social*, and *Problem Solving* categories are important outcomes from ASQ-3 assessments. In *Focus Areas II* and *III*, a total of 17 programs received First 5 Kern funding to support well-rounded child development. Despite sample size variations, the results unanimously confirmed the practical impact of program services with large effect sizes.



## 2. Child Assessment-Summer Bridge Results

The First 5 Association of California (2015a) maintained that “The importance of preparing children to succeed in school is critical. Skills that allow one to problem solve and think creatively are developed in early childhood education settings and nurtured through community and parental reinforcement” (p. 1). First 5 Kern funded Summer Bridge (SB) programs to prepare preschoolers for kindergarten transition. The program impact was assessed by Child Assessment-Summer Bridge (CASB) data from 11 programs. Improvement of *Communication, Cognitive, Self-Help, Social Emotional*, and *Motor* skills was tracked for 414 children ages 4-5 under a pretest-and-posttest setting.

Since the program size varied from 13 at LHFRC to 141 at BCSD (Table 28), probability values and effect sizes have been computed to address both statistical significance and practical impact. The results showed significant improvement of cognitive skills between pretest and posttest across all SB programs (Table 28). Effect size indices also suggested strong practical impact from these SB programs on enhancement of *Cognitive* skills.

**TABLE 28: TEST OF AVERAGE SCORE DIFFERENCE ON CASB COGNITIVE SKILLS**

Program*	N	Pretest	Posttest	t	P	Effect Size
AFRC	23	16.35	34.91	5.70	.0001	2.43
BCRC	21	53.55	64.24	2.42	.0253	1.08
BCSD	141	56.71	63.55	7.23	.0001	1.22
DSR	28	59.57	66.46	3.10	.0045	1.19
GSR	37	55.67	74.27	7.50	.0001	2.50
LHFRC	13	37.60	47.50	4.85	.0004	2.80
LVS RP	45	52.00	56.47	4.01	.0002	1.21
MC FRC	21	55.67	88.95	5.31	.0001	2.37
MFRC	20	52.46	58.10	3.95	.0008	1.81
SHS	25	55.96	83.08	8.69	.0001	3.55
WSCRC	40	32.24	53.70	10.31	.0001	3.30

\*Program acronyms are listed in Appendix A.

In comparison, cognitive development was considered as a primary measure of school readiness by many researchers (Cannon, Jacknowitz, & Karoly, 2012). While all programs generated satisfactory results on this key indicator, it was worth noting that SHS and WSCRC also demonstrated strong and significant impacts on improvement of *Communication, Fine Motor, Self-Help*, and *Social Emotional* skills (Table 29).

**TABLE 29: TEST OF AVERAGE SCORE DIFFERENCE ON CASB NON-COGNITIVE SKILLS**

Program	Scale	N	Pretest	Posttest	t	P	Effect Size
Shafter Healthy Start	Communication	25	9.00	9.84	2.47	.0210	1.01
	Fine Motor	25	7.16	9.16	6.79	.0001	2.77
	Self-Help	25	9.08	10.00	2.96	.0068	1.21
	Social Emotional	25	8.08	9.84	4.80	.0001	1.96
West Side Community Resource Center	Communication	40	5.20	9.10	20.76	.0001	6.65
	Fine Motor	40	3.87	9.08	19.67	.0001	6.30
	Self-Help	40	5.02	9.68	38.21	.0001	12.24
	Social Emotional	40	5.11	9.90	39.35	.0001	12.60

In addition, with exception from MFRC, the remaining programs showed significant improvement in at least one non-cognitive domain. The practical impact was indicated by a moderate to strong effect sizes (0.75 – 3.20) in Table 30. Because the CASB instrument has designated fewer items for assessing *Communication*, *Fine Motor*, *Self-Help*, and *Social Emotional* skills, results on these dimensions were not as confirmatory as the ones for *Cognitive* skills.

**TABLE 30: TEST OF AVERAGE SCORE DIFFERENCE ON CASB NON-COGNITIVE SKILLS**

Scale	Program*	N	Pretest	Posttest	t	P	Effect Size
Communication	AFRC	23	6.70	8.91	5.70	.0001	2.43
	BCRC	21	9.03	9.33	2.34	.0300	1.05
	DSR	28	8.73	9.46	2.20	.0364	0.85
	GSR	37	8.95	9.35	2.25	.0305	0.75
	LVS RP	45	8.32	9.42	2.75	.0087	0.83
Fine Motor	AFRC	23	2.43	7.22	7.50	.0001	3.20
	BCRC	21	8.32	9.29	2.48	.0221	1.11
	BCSD	141	7.60	8.57	5.91	.0001	1.00
	DSR	28	7.87	8.89	4.19	.0003	1.61
	GSR	37	7.74	9.16	4.93	.0001	1.64
	LHFRC	13	8.33	8.64	2.48	.0288	1.43
	MCFRC	21	6.48	9.43	4.83	.0001	2.16
Self-Help	LVS RP	45	9.08	9.72	4.97	.0001	1.50
Social Emotional	AFRC	23	6.70	8.78	3.86	.0008	1.65
	BCRC	21	8.71	8.95	2.17	.0423	0.97
	GSR	37	5.02	9.49	4.23	.0002	1.41
	LHFRC	13	8.87	9.50	3.39	.0053	1.96
	LVS RP	45	8.40	9.45	6.61	.0001	1.99
	MCFRC	21	8.57	9.67	4.60	.0002	2.06

\*Program acronyms are listed in Appendix A.

In combination, results from Tables 29 and 30 showed significant improvement of *Communication* skills in seven programs that served 219 preschoolers. Nine SB programs supported significant improvement of *Fine Motor* skills among 349 children. Three programs demonstrated significant enhancement of *Self-Help* skills among 110

preschoolers. Significant improvement occurred with 225 children in the *Social-Emotional* domain across eight programs.

### 3. Ready to Start Findings

Ready to Start (R2S) is another SB program to prepare pre-reading, math, and social skills for children immediately preceding their entry into kindergarten. This intensive program lasted five weeks to enrich preschool experiences for children who never attended preschool before. In FY 2014-15, R2S was offered in four school districts<sup>37</sup>. Pretest and posttest data have been tracked for 550 children using the R2S Standard Test that designated a total of 22 points in the areas of *Reading* (0-8 points), *Math Readiness* (0-10 points), and *Supportive Skills* (0-4 points).

Based on the value-added assessment, the mean score across three areas showed an increase from 12.39 in pretest to 20.21 in posttest. In comparison to similar results from last year, the pretest score was lower and the posttest score was higher this year. Thus, R2S produced a slightly larger gain score to enhance child kindergarten readiness. Table 31 delineated average scores in *math*, *reading*, and *social skill* domains for each district.

**TABLE 31: COMPARISON OF AVERAGE SCORES FROM R2S PRETEST AND POSTTEST**

District	N	Math		Reading		Social Skills	
		Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
Greenfield	263	5.03	8.57	4.82	7.76	1.71	3.55
PBVUSD	145	6.08	9.15	5.26	8.28	1.53	3.60
Rosedale	88	5.15	8.86	5.33	8.11	2.27	3.51
Standard	54	6.00	9.38	6.02	8.25	2.48	3.77

Despite the program size differences across school districts (Table 31), statistical test results indicated significant improvements in *math*, *reading*, and *social skills* in Table 32. With effect sizes larger than 0.8 (see Table 32), R2S has demonstrated a strong practical impact on early childhood development. In comparison to other SB programs, R2S was more rigorous, requiring “All classrooms throughout the program [to] follow the same structured curriculum each day” (Ready to Start, 2012, p. 1). Child admission was determined by a mandatory pre-test of readiness skills<sup>38</sup>. The strict program control has supported its goal of preparing children on equal footing with other preschoolers prior to kindergarten entry.

<sup>37</sup> The districts are Greenfield Union School District, Panama-Buena Vista Union School District, Rosedale Union School District, and Standard School District.

<sup>38</sup> <http://pbvUSD.schoolwires.net/Page/1937>

**TABLE 32: R2S T TEST AND EFFECT SIZE RESULTS**

District	df	Math		Reading		Social Skills	
		t*	Effect Size	t*	Effect Size	t*	Effect Size
Greenfield	262	24.77	3.07	24.50	3.04	21.29	2.64
PBVUSD	144	19.56	3.27	19.50	3.26	18.38	3.08
Rosedale	87	18.33	3.95	17.36	3.72	10.34	2.23
Standard	53	12.70	3.56	11.20	3.14	6.23	1.74

\*The t values were all highly significant for  $p < .0001$ .

#### 4. Desired Results Developmental Profile-Infant/Toddler Indicators

Desired Results Developmental Profile-Infant/Toddler (DRDP-IT) was designed for teachers to observe, document, and reflect on learning and development of infants and toddlers in *early care and education* programs. The focus on infant and toddler development has addressed a key national interest. According to the United Nations Children's Fund (2011), "A country's position in the global economy depends on the competencies of its people and those competencies are set early in life — before the child is three years old" (¶. 7).

In FY 2014-15, First 5 Kern funded three programs that employed DRDP-IT to assess the service impact on child development. Table 33 lists sample sizes and total average scores from DRDP-IT at the program level.

**TABLE 33: CROSS-SECTIONAL DESCRIPTION OF DRDP-IT DATA IN THREE PROGRAMS**

Program*	Initial Assessment		Follow-up Assessment	
	N	Mean	N	Mean
BCDC	11	9.57	5	16.60
DDLCCC	9	17.84	8	21.11
SSCDC	6	16.18	10	18.86

\*Program acronyms are listed in Appendix A.

Due to small sample sizes at the program level, a total of 16 children were tracked in the DRDP-IT assessment across three programs. Significant differences have been found across three programs in important domains of *Self and Social Development* (SSD), *Language and Literacy Development* (LLD), *Cognitive Development* (COG), *Motor and Perceptual Development* (MPD), and *Health* (HLTH) (Table 34).

**TABLE 34: RESULTS FROM DRDP-IT MATCHED CASES ACROSS THREE PROGRAMS**

Domain	df	t	P	Effect Size
SSD	15	5.55	.0001	2.87
LLD	15	5.63	.0001	2.91
COG	15	5.24	.0001	2.71
MPD	15	7.79	.0001	4.02
HLTH	4	5.20	.0023	5.20

Child growth in these domains was inseparable from brain development. As Liu (2014) pointed out, “The first three years of life are a period of dynamic and unparalleled brain development in which children acquire the ability to think, speak, learn, and reason” (p. 3). These three programs have captured a critical period to support child development in SSD, LLD, COG, MPD, and HLTH dimensions. The strong practical impact was illustrated by large effect sizes in Table 34.

## 5. Desired Results Developmental Profile-Preschool Summary

A total of six programs employed the Desired Results Developmental Profile–Preschool (DRDP-PS) assessment to track program effectiveness under a pretest-and-posttest setting. The results for HLP were presented in the *Child Health* section of this chapter. For the remaining five programs, sample sizes for DSR, DDLCCC and SSCDC were 7, 4, and 5, respectively.

In FY 2014-15, DSR administered two sessions of three-hour preschool for children who did not qualify for California State Preschool Program. The Houghton Mifflin Pre-K language arts/mathematics curriculum was adopted along with Preschool Guided Language Acquisition Design (PreGLAD) strategies, which was aligned with the DRDP-PS assessment. In contrast, DDLCCC served children at the Bakersfield Homeless Center for parents to attend career development and substance prevention training. Enrollment priorities were given to children receiving protective services or at-risk for neglect, abuse or exploitation. SSCDC modeled after DDLCCC to meet education needs of children from single-parent households whose mothers experienced domestic violence in the past.

**TABLE 35: GAIN SCORES FROM DRDP-PS DOMAINS IN THREE PROGRAMS**

Program*	SSD	LLD	ELD	COG	Math	PD	HLTH
DSR	1.56	1.57	0.67	1.13	1.64	1.38	1.76
DDLCCC	0.54	0.55	-	0.69	0.46	0.08	0.16
SSCDC	1.02	1.32	-	1.33	1.37	0.87	0.80

\*Program acronyms are listed in Appendix A.

Gain scores have been computed in Table 35 as the mean score differences (i.e., posttest score – pretest score) to show improvement of child performances in seven domains: *Self and Social Development* (SSD), *Language and Literacy Development* (LLD), *English Language Development* (ELD), *Cognitive Development* (COG), *Mathematical Development* (MATH), *Physical Development* (PD), and *Health* (HLTH). In general, SSCDC was positioned between DSR and DDLCCC, serving weaker families than DSR and stronger families than DDLCCC. Due to the small sample sizes, no statistical testing was conducted to examine the result significance through probabilistic inference. Nonetheless, gain score differences in Table 35 reflected the program difference in child development outcomes.

**TABLE 36: RESULTS FROM DRDP-PS MATCHED CASES ACROSS PROGRAMS**

Domain	Program*	df	t	P	Effect Size
SSD	SFP	14	8.53	.0001	4.56
	WIW	19	12.50	.0011	5.74
	Total	50	16.75	.0001	4.74
LLD	SFP	14	12.96	.0001	6.93
	WIW	20	18.11	.0001	8.10
	Total	51	22.29	.0001	6.24
COG	SFP	14	7.39	.0001	3.95
	WIW	19	11.20	.0001	5.14
	Total	50	16.73	.0001	4.73
MATH	SFP	14	8.73	.0001	4.67
	WIW	20	11.92	.0001	5.33
	Total	51	17.04	.0001	4.77
PD	SFP	14	7.87	.0001	4.21
	WIW	19	9.13	.0001	4.19
	Total	50	11.91	.0001	3.37
HLTH	SFP	14	5.61	.0001	3.00
	WIW	19	9.00	.0001	4.13
	Total	50	11.00	.0001	3.11

\*Program acronyms are listed in Appendix A. The total category includes DSR, DDLCCC, & SSCDC.

SFP and WIW tracked more than a dozen children in preschool settings. Strong and significant impacts have been found from these programs on child growth across the SSD, LLD, COG, MATH, PD, and HLTH domains of DRDP-PS assessment (Table 36). SFP was highlighted for its exceptional performance in First 5 Kern's report to the state three years ago. WIW was recognized as an exemplary program in First 5 Kern's report this year.

## 6. School Readiness Articulation Survey Results

Articulation meetings were held at the program level to enhance collaboration among key stakeholders. This effort has enhanced collaborations among program staff, parent educators, preschool teachers, and district supervisors. The total number of articulation meetings increased from 38 in last year to 43 this year across *Focus Areas II* and *III*. School Readiness Articulation Survey (SRAS) data have been gathered from 111 classroom teachers, school administrators, and community members to assess the impact of local services on child development in Kern County. To facilitate value-added assessment, past responses were tracked from 128 parents last year to compare changes in the percent of "agree" and "strongly agree" responses in Table 37.

**TABLE 37: PERCENT OF "AGREE" OR "STRONGLY AGREE" RESPONSES TO SRAS ITEMS**

SRAS Items	2013-14	2014-15
Parents know about early childhood learning	32	40
Parents know about community resources	46	56

The results showed that more parents *knew about early childhood learning* this year than last year. In addition, the percent of parents *knowing about community resources* increased from 46% last year to 56% this year. In combination, the first indicator in Table 37 suggested improvement of *parent education* and the second indicator represented resource availability for *parent support*.

In addition to the internal service alignment, First 5 Kern led service providers to leverage \$235,911 from external partners in *Child Development* (Table 38). According to Friedman (2009), "RBA [Results-Based Accountability] makes a fundamental distinction between Population Accountability and Performance Accountability" (p. 2). While performance accountability is demonstrated by program effectiveness, population accountability relies on partnership building (Friedman, 2011). Guided by the state focus area, *Systems of Care*, more information is provided for *partnership building* in the next chapter to elaborate service integrations across focus areas.

**TABLE 38: FUND LEVERAGE IN FOCUS AREA III: CHILD DEVELOPMENT**

Program*	Sources of Additional Funding	Amount
DDLCCC	Donations	\$7,661
LHFRC	Corporate Donations	\$1,000
NOR	Corporate Donations, Fundraiser, and Fees/Tuition	\$52,415
R2S	Bakersfield Californian Foundation, Donations (Corporate and Individual), United Way, and Kern Community Foundation	\$91,667
SSCDC	Donations (Corporate and Individual), Wells Fargo Foundation, Fundraiser, and Fees/Tuition	\$36,000
SFP	Donations, Fundraisers, and Fees/Tuition	\$14,330
WIW	Borax Visitor Center, Desert Lake Community Services, Donations, Fees/Tuition, Fundraisers, and United Way	\$32,838

\*Program acronyms are listed in Appendix A.

In summary, three major sections were designated in this chapter to aggregate program results in ***Child Health, Family Functioning, and Child Development***. Each part included a description of direct services and referral supports to delineate the scope of service delivery. Enhancement of the program quality has been documented by consistent improvements of service outreach and assessment outcomes. As service providers collaborated under First 5 Kern's Strategic Plan over the past five years, the network building has enabled programs to leverage a total of \$2,802,248 in FY 2014-15 (see Tables 7, 22, & 38). The joint effort across focus areas has supported *Systems of Care* for children ages 0-5 and their families throughout Kern County.



## Chapter 3: Effectiveness of Service Integration

"Too often child health is viewed as separate and distinct from early childhood care and learning" (Bruner, 2009, p. 1). To address the issue of fragmentation, service integration is examined in this chapter across focus areas. According to Proposition 10, "No county strategic plan shall be deemed adequate or complete until and unless the plan describes how programs, services, and projects relating to early childhood development within the county will be integrated into a consumer-oriented and easily accessible system" (p. 10). The need for *Systems of Care* was reaffirmed by the Health Resources and Services Administration (2014) to ensure seamless support for early childhood development.

In FY 2014-15, interview sessions were arranged to collect data on service integration among 39 programs. The service network was supported by First 5 Kern's Strategic Plan to designate 12 programs in *Child Health*, 17 programs in *Family Functioning*, and 10 programs in *Child Development*. Based on the overlap of program features across focus areas, service providers engaged in partnership building as initiators and/or collaborators. While the network structure was set hierarchically with programs nested in focus areas, a *Co-Existing, Collaboration, Coordination, and Creation* (4C) model was adopted to examine strength of ties for partnership enhancement (Wang, Ortiz, & Schreiner, 2013).

Cross et al. (2009) confirmed that "Existing research has demonstrated that two primary features of networks, network structure and the strength of ties, have distinct effects on outcomes of interest" (p. 311). A computer software package, *Netdraw*, has been employed to analyze the multilevel service integration through social network analyses (SNA). Gillieatt et al. (2015) indicated that SNA was a useful tool to "examine indicators of service integration such as the frequency, type, and direction of information exchanges including referral pathways" (p. 338). In this chapter, the SNA approach is taken to investigate network ties and partnership structures across the focus areas of *Child Health*, *Family Functioning*, and *Child Development*.

### Capacity Building in Service Integration

#### Networking across Focus Areas

First 5 Kern's (2015a) Strategic Plan contains an important *Result Statement* for service integration, i.e., "A well-integrated system of services for children and families will exist" (p. 7). In gathering community support, First 5 Kern (2015a) identified four objectives to promote:

1. Health and wellness of children and their families;
2. Parent education and support services;
3. Early childcare and education;
4. Public education and community awareness.

Service integration was guided by these objectives to strengthen program outreach and partnership building among 39 service providers. In FY 2014-15, the result aggregation indicated that four school districts offered additional services to sponsor dental exams for 138 children in Summer Bridge programs. Five school districts provided health screenings for 202 preschoolers. In addition, programs in *Family Functioning*

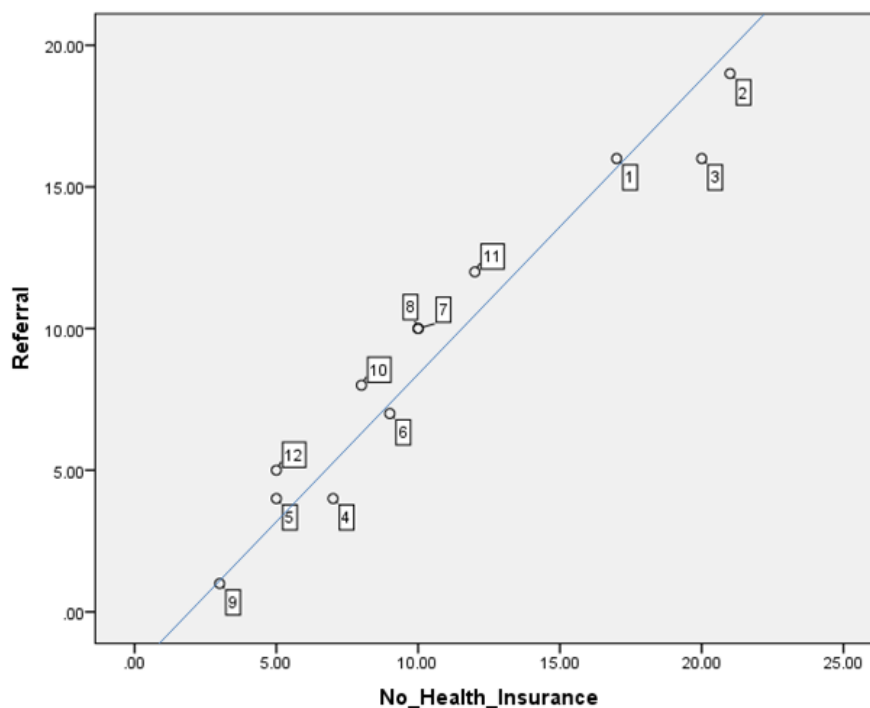
increased medical home capacities from 200 children last year to 238 children this year. The service network across focus areas directly contributed to improvement of *health and wellness* for children ages 0-5 and their families (Objective 1).

Regarding child protection, “Many families may qualify for insurance but because of a lack of information, they do not access it” (Smith et al., 2009, p. 6). To overcome this barrier, programs outside of *Child Health* supported health insurance applications for a total of 449 families. These programs in *Family Functioning* and *Child Development* also ensured up-to-date immunizations for 257 children. The partnership building not only extended affordable insurance coverage in hard-to-reach communities, but also fit a priority of First 5 Kern (2015a) in promoting “Enrollment, access, retention and utilization of health insurance, and oral, physical and mental health care” (p. 5).

From an educational perspective, “there has been a growing interest in the development of health concepts, beliefs, and behaviors in young children. This interest stems largely from educators concerned with the provision of optimal healthcare services and health education to children” (Clark, 1992, p. 1). The common interest has led to enhancement of parent education and support services through partnership building (Objective 2). In FY 2014-15, program-specific education was offered by four *Child Health* programs to enrich knowledge of 637 parents about *dental care, infant health, and water safety*. The service coverage increased from 622 parents in last year. These programs also offered in-service workshops on health topics for a total of 2,303 parents this year. The service integration was grounded on a fact that “children need good health, strong families, and positive early learning experiences to lay the foundation for later school success” (Liu, 2014, p. 3).

In support of child growth, developmental assessments were offered by *Family Functioning* and *Child Health* programs for a total 696 children. The program capacity increased from 368 children last year to 406 children this year. Within WSN, additional developmental assessment was conducted on socio-emotional indicators for 68 children this year, an increase from 58 children last year. BCSD and DSR also expanded assistance for health insurance applications, and the number of participating families increased from 39 in last year to 59 this year. These service outcomes collectively indicated improvement of service integration in early childcare and education (Objective 3).

Through the network building, service referrals were offered to improve program access and community awareness (Objective 4). While MVCCP coordinated community support for medically vulnerable infants, DR used seven Referral Contact Supervisors (RCS) to disseminate information on its services for child protection, and GBLA offered workshops in outlying areas to increase public awareness about DVRP and GCP services. In *Family Functioning*, 2-1-1 Kern County offered center-based referrals. A pattern between 2-1-1 phone calls and health insurance referrals was depicted in Figure 24. The correlation coefficient reached 0.97, illustrating consistency of the referral service in addressing the need of health insurance enrollment in FY 2014-15. In combination, the referral network has strengthened service partnership to “Assure that programs provide access to information, resources and support regarding a child’s development” (First 5 California, 2014, p. 3).

**Figure 24: Pattern of Health Insurance Referrals in FY 2014-15**

Note: Numeric numbers are used track the month sequence in the fiscal year.

Researchers further noted that “the need [was] not just to enroll children in health insurance but to retain them once enrolled” (Inkelas et al., 2003, p. x). Hence, sustainability played an important role in service delivery. While program access can be quantified by increases of service count, Einstein cautioned that “not everything that can be counted counts”<sup>39</sup>. In support of the *Systems of Care*, a theoretical framework is needed to track the depth of partnership building between adjacent years.

### Classification of Partnership Building

Cross, Dickman, Newman-Gonchar, and Fagen (2009) observed, “Evaluating interagency collaboration is notoriously challenging because of the complexity of collaborative efforts and the inadequacy of existing methods” (p. 310). In the case of Kern County, each of the 39 programs may collaborate with the remaining 38 partners. Consequently, the network could contain a total of 1,482 (or 38x39) links. To disentangle the network structure, the evaluation team developed a *Co-Existing, Collaboration, Coordination, and Creation* (4C) model for evaluating partnership enhancement across focus areas (Wang, Ortiz, & Schreiner, 2013). This effort was needed because “Strength of the links matter” (Yolum & Singh, 2003, p. 9). In addition to the scope of program outreach, network capacity also depended on the partnership strength.

Prior to the model dissemination at the 2013 NAEYC annual meeting, no systematic efforts have been made on partnership classification from major professional organizations. A closest relative to the 4C model was a five-level template from Project

<sup>39</sup> [www.quotationspage.com/quote/26950.html](http://www.quotationspage.com/quote/26950.html)

Safety Net of Palo Alto (2011). While referring to past literature, the Palo Alto project treated “formal communication” as a network component at a *Cooperation* level. Unfortunately, the communication concept was characterized by *frequent, prioritized, and/or trustworthy* features to fit other categories of *Coordination, Coalition, or Collaboration*. This ambiguity undermined feasibility of using the Palo Alto approach to assess strength of network capacity.

Opposite to the lack of mutual exclusiveness was an issue of incomprehensiveness in alternative classifications. For example, an annual evaluation report of First 5 Fresno (2013) included *Coordination* and *Collaboration* as the *highest* levels of partnership building, which inadvertently eliminated a top level for new partnership creation. The incomprehensiveness hindered program evaluation for two reasons: (1) It did not conform to Bloom’s taxonomy that placed *creation* as a separate level above *integration* (Airasian & Krathwohl, 2000), and (2) It downplayed adequacy of program referrals at the *Co-Existing* level. Without this baseline, the classification was incomplete for assessing enhancement of network strength on a time dimension.

According to Stufflebeam (1983), service outcomes were improved through an institutional learning process. The structure of learning outcomes can be linked to a well-established SOLO [Structure of the Observed Learning Outcome] taxonomy (Atherton, 2013; Biggs & Collis, 1982). The taxonomy was employed in various profound studies, including a validity study of national board certification (see Smith, Gorden, Colby, & Wang, 2005). Based on the SOLO taxonomy, four levels of learning outcomes were identified beyond an initial *pre-structural* category. Each level has been clearly defined with specific benchmarks (Table 39).

**TABLE 39: ALIGNMENT BETWEEN SOLO TAXONOMY AND THE 4C MODEL**

SOLO	The 4C Model
Uni-Structural: Limited to one relevant aspect	Co-Existing: Confined in a simple awareness of co-existence
Multi-Structural: Added more aspects independently	Collaboration: Added mutual links for partnership support
Relational: United multiple parts as a whole	Coordination: United multiple links with structural leadership
Extended Abstract: Generalized the whole to new areas	Creation: Expanded capacity beyond existing partnership

The one-to-one match in Table 39 illustrated a clear alignment between the SOLO taxonomy from research literature and the 4C model for institutional service integration. With the one-to-one match in categorization, the 4C model incorporated levels of classification that were both comprehensive and mutually exclusive. Thus, the 4C taxonomy can be employed to support evaluation of network strength in partnership building.

In summary, 4C model was developed from both confirmatory and exploratory approaches to link practical needs to professional practice. In the confirmatory part, the 4C model met the demand from Proposition 10 to justify program improvement in service integration. The taxonomy also featured an exploratory component to fill a void of the research literature for incorporating outcomes of institutional learning in partnership ranking. Tom Angelo (1999), former director of the national assessment forum,

maintained, “Though accountability matters, learning still matters most” (¶. 1). After its dissemination in 2013, the 4C model has been adopted to address both program accountability and service improvement in program evaluation – While classifying different levels of partnership building to delineate program accountability, the model offered a hierarchical platform to rank network connections for service improvement (Wang, Ortiz, Maier, & Navarro, 2015).

### Establishment of Reciprocal Links

Provan, Veazie, Staten, and Teufel-Shone (2005) noted that “In the academic literature, network analysis has been used to analyze and understand the structure of the relationships that make up multiorganizational partnerships” (p. 603). As a unit of service delivery, programs extended mutual support across focus areas (see Tables 18, 19, & 24), which offered opportunities for service networking. According to the 4C model, the *Co-Existing* level can be described as mutual awareness of program existence, which did not involve concerted effort on partnership building. At the baseline, the number of links initiated from three focus areas added to 1,482 (Figure 25), which matched the total possible links from the entire network of 39 programs (i.e.,  $38 \times 39 = 1,482$ ). The result agreement confirmed comprehensiveness of the 4C model for describing partnership building.

**Figure 25: Count of Network Links Initiated from Focus Areas in FY 2014-15**

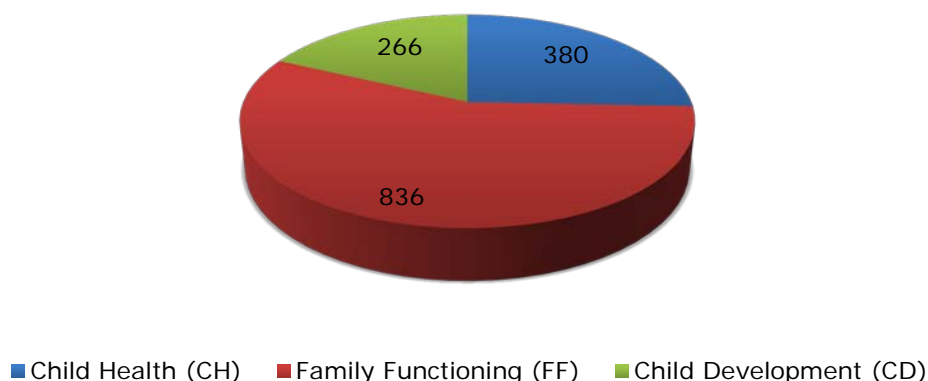
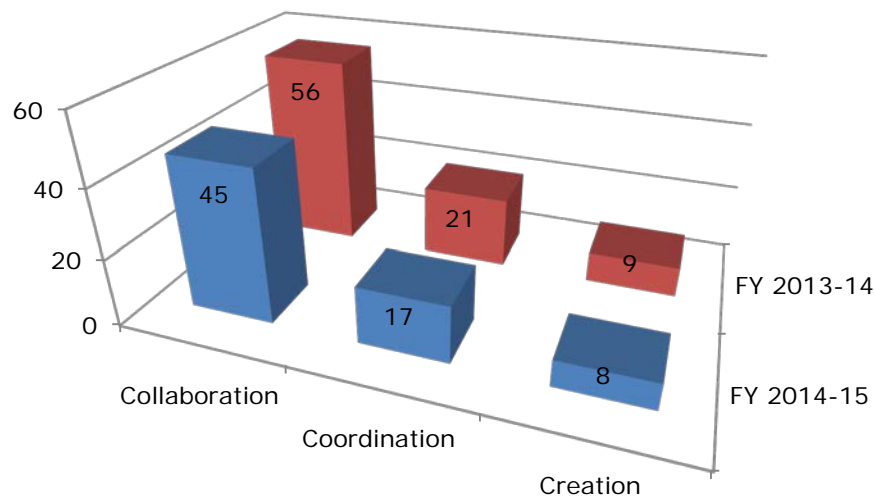


Figure 25 also indicated that the number of links initiated from each focus area was related to program counts. Ten programs were funded in *Child Development* that generated 266 links. In contrast, *Family Functioning* had 17 programs and 836 partnership initiations. *Child Health* included 12 programs and originated 380 links. The pattern revealed a fact that *the more the program count, the more the partnership initiations*. To ensure a fair comparison, the same 39 programs were tracked between last year and this year to examine partnership structure changes on the time dimension.

Beyond the *Co-Existing* level, Figure 26 indicated more partnership counts in mutual *Collaboration* than in multilateral *Coordination*. In addition, new partnership development demanded creative efforts, and thus, its network included less than 10 links at the *Creation* level. The hierarchical pattern from empirical data supported the theoretical framework of the 4C model to rank partnership improvement across focus areas.

**Figure 26: Number of Reciprocal Links Beyond Co-Existing Levels**

Cesar and Hidalgo (2008) reported that reciprocal relationships were highly probable to persist in the future. To describe network sustainability, a useful computing syntax was developed in the Statistical Analysis System to sort network links beyond the *Co-Existing* level and identify reciprocal relations across focus areas (see Table 40).

**TABLE 40: MUTUAL PARTNERSHIP BUILDING BEYOND CO-EXISTING LEVEL**

Network Category	Domain(s) of Reciprocal Link	Network Count in FY 2013-14	Network Count in FY 2014-15
Collaboration	Child Health (CH)	4	1
	Family Functioning (FF)	29	30
	Child Development (CD)	2	1
	Between CH and FF	3	0
	Between CH and CD	7	4
	Between FF and CD	11	9
Coordination	Child Health (CH)	2	2
	Family Functioning (FF)	6	6
	Child Development (CD)	1	1
	Between CH and FF	8	4
	Between CH and CD	1	1
	Between FF and CD	3	3
Creation	Child Health (CH)	2	1
	Family Functioning (FF)	2	2
	Child Development (CD)	1	1
	Between CH and FF	2	2
	Between CH and CD	2	2
	Between FF and CD	0	0

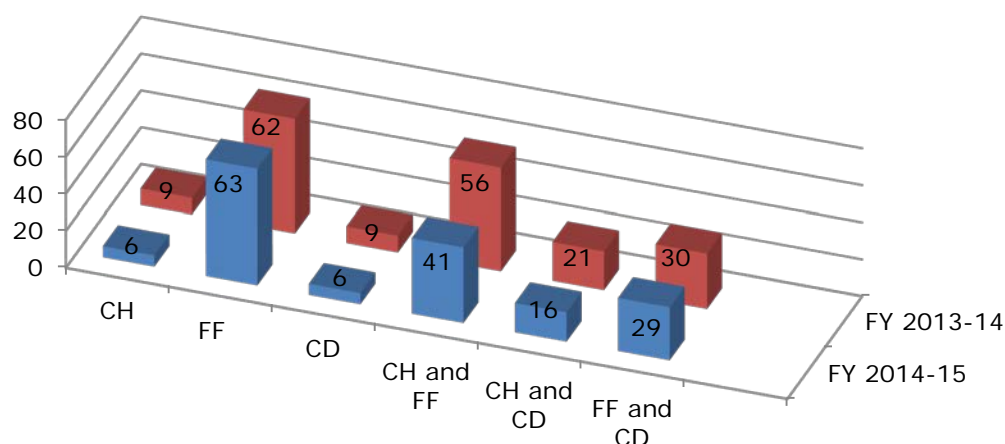
Despite discontinuation of EIP services in FY 2014-15, 10 out of 18 rows in Table 40 showed no reduction in reciprocal links at *Collaboration*, *Coordination*, and *Creation* levels. On the contrary, an increase in the reciprocal links occurred at the *Collaboration* level in *Family Functioning* (see Row 2 in Table 40). In part, this was because First 5 Kern



has arranged RSNC to inherit part of the service coverage from EIP. The commission leadership has reduced the impact of program adjustment on the *Systems of Care*.

The pattern of reciprocal links in Figure 27 showed the mode of reciprocal links in *Family Functioning* between two adjacent years, which was consistent with more program affiliations in that focus area. Although EIP links were excluded from the network comparison, its indirect impact could occur in last year through service referrals. Consequently, Figure 27 showed reduction of the network capacity in five categories. From this perspective, First 5 Kern has decided to fund more programs in the next funding cycle, which could lead to expansion of the network connections in FY 2015-16.

**Figure 27: Count of Reciprocal Partnerships between Adjacent Years**



Reciprocal links have been treated as important indicator in the research literature to describe mutual partnerships. Singhal, Subbian, Srivastava, Kolda, and Pinar (2013) reported that "In general, we observe that reciprocation rate is inversely related to the barrier level in these networks" (p. 1). Except for the network within *Family Functioning*, Figure 27 showed double-digit counts of reciprocal links between focus areas (see *FF and FF*, *CH and FF*, *FF and CD*), more than twice of the partnership count in *Child Health* or *Child Development*. Hence, under First 5 Kern's leadership, no substantial barrier was found across focus areas against service integration in both years.

### Network Structure across Service Providers

While strength of networking was described in each focus area (Table 40), network structure hinged on partnership configurations at the program level. This section starts with a comparison of reciprocal links between last year and this year. Although "human communications are mostly reciprocal" (Akoglu, de Melo, & Faloutsos, 2012, p. 11), partnership development may involve different roles between initiators (the "I" perspective) or collaborators (the "me" perspective). While the role differentiation is not critical for reciprocal links, special partnership roles are examined for *singular* networks near end of this section.



## Enhancement of Reciprocal Partnerships

According to Kuhnt and Brust, (2014), lack of reciprocal partnerships “is only found in relations of exploitation maintained through asymmetries of power” (p. 1). Because contractors competed for First 5 Kern funding in a fair and transparent process, no asymmetry of power existed among programs, which in favored development of reciprocal relations across focus areas.

In its Strategic Plan, First 5 Kern (2015a) also emphasized needs for “Replicable” service integration (p. 5). Because replicability involved new partnership creation, Table 41 showed network plots at the *Creation* level to document the progress between last year and this year. In each plot, three colors were employed to represent programs in *Child Health* (Blue), *Family Functioning* (Pink), and *Child Development* (Brown). The results indicated that partnership creation occurred across all three focus areas. Persistency of the service integration was illustrated by participation of the same 12 programs in both years. The number of links also matched results at the *Creation* level in Figure 26.

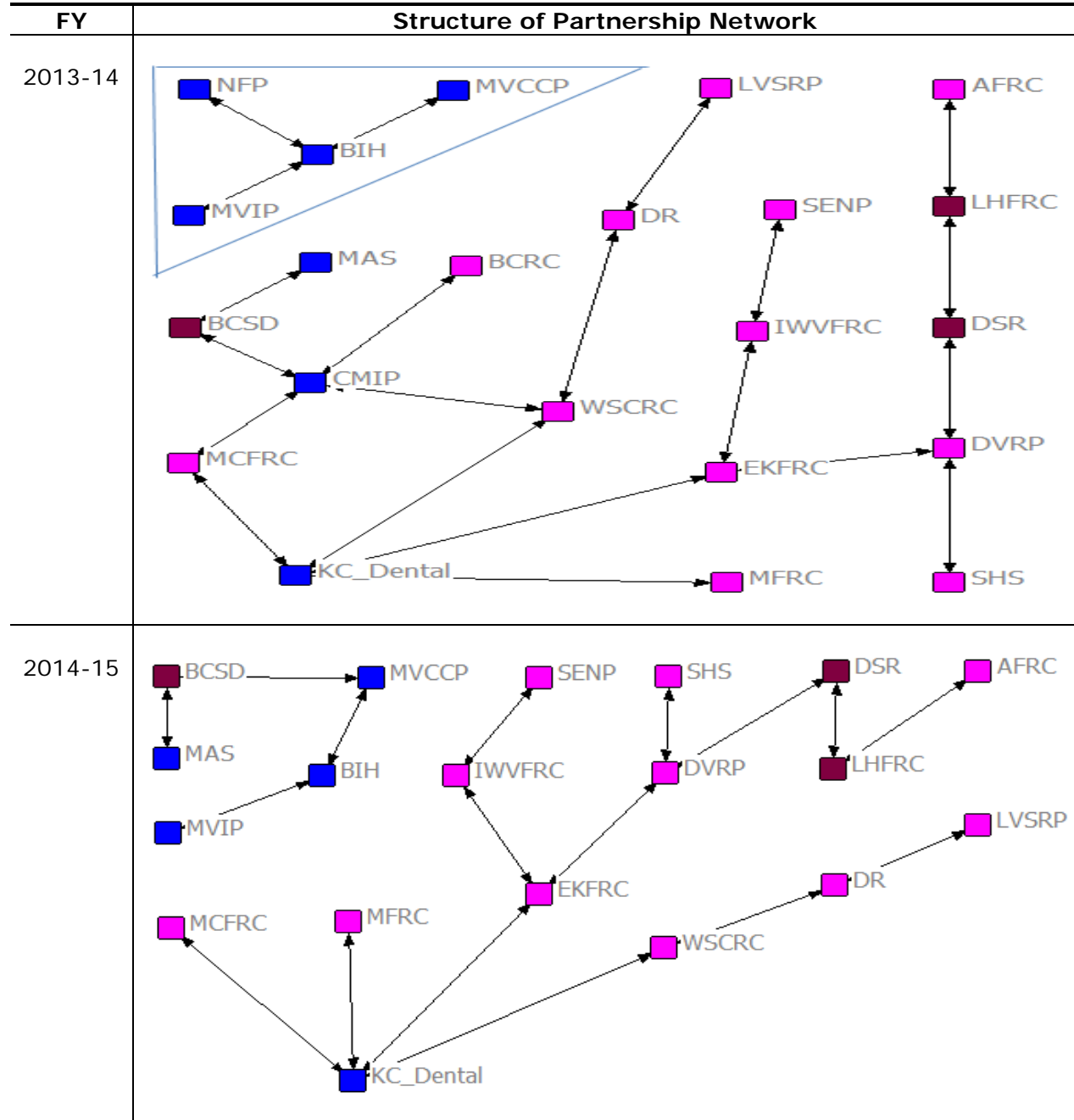
**TABLE 41: STRUCTURE OF CONFIRMED LINKS AT THE CREATION LEVEL**

FY	Structure of Partnership Network
2013-14	
2014-15	

\*Program acronyms are listed in Appendix A.

At the *Coordination* level, structures of program links were split into two groups, one for *Child Health* and the other for *Child Development*. In FY 2014-15, partnerships in *Child Health* were expanded to involve Bakersfield City School District (BCSD) (Table 42). Meanwhile, countywide programs, such as MVIP and MVCCP, continued their roles in the partnership building to support minority and/or medically vulnerable children in both years.

**TABLE 42: STRUCTURE OF CONFIRMED LINKS AT THE COORDINATION LEVEL**



\*Program acronyms are listed in Appendix A.

In contrast, more reciprocal links were established to support *Child Development* (Table 42). In both years, a dental service provider was positioned at a centroid with multiple links (i.e., KC\_Dental). The network stability was illustrated by involvement of the same service providers (BCSD, DSR, LHFRC) in *Child Development*. In addition, a half dozen heterogeneous programs partnered as a group to extend mutual support across focus areas this year (i.e., KC\_Dental-EKFRC-DVRP-DSR-LHFRC-AFRC). As was advocated by Singhal et al. (2013), "reciprocation is significantly improved by incorporating features from other heterogeneous networks" (p. 7).

**TABLE 43: STRUCTURE OF CONFIRMED LINKS AT THE COLLABORATION LEVEL**

Fiscal Year	Structure of Partnership Network
2013-14	<p>Network diagram for 2013-14 showing a dense web of connections between 20 entities. Entities are color-coded: blue (MVCCP, SAS, KC_Dental, SSEC, WSN, RSN, CMIP, MFR, DVRP, KRVFRC, GCP, MAS, HLP, BCRC, LVS, SENP, DR, GSR, SHS, MCFRC, NOR, R2S, DSR, MVIP, BCSD, AFRC, LHFR, WSCRC, 2-1-1). The network is highly interconnected with many bidirectional links.</p>
2014-15	<p>Network diagram for 2014-15 showing a less dense web of connections between 18 entities. Entities are color-coded: blue (MVCCP, KC_Dental, SSEC, WSN, AFRC, DR, GCP, BCRC, GSR, SHS, MCFRC, NOR, HLP, MVIP, BCSD, DSR, LVS, SENP, R2S, DSR, MVIP, BCSD, AFRC, LHFR, WSCRC, 2-1-1). The network shows a reduction in connections compared to 2013-14.</p>

\*Program acronyms are listed in Appendix A.

Inspection of Table 43 revealed that DR in *Family Functioning* was connected to eight programs between adjacent years. NFP in *Child Health* also had eight links in Table 43. BCSD in *Child Development* was in third place to network with six partners at the *Collaboration* level. Thus, effort on service coordination was demonstrated by key programs from all three focus areas.

With support from the reciprocal network, DR's quarterly service count added to a total of 2,909 families in case-management against substantiated child abuse and/or neglect. NFP made 394 referrals during its home visits to support families with high-risk, low-income, and first-time mothers. BCSD delivered early childhood support from three FRCs and 12 elementary school sites. Its service coverage included (1) assisting 28 children with health insurance enrollment, (2) providing health screening for 157 children, (3) case-managing 142 families, (4) delivering home-based education for 31 children, (5) offering group-based education for 318 parents and 179 children, and (6) sponsoring Summer Bridge programs for 174 preschoolers.

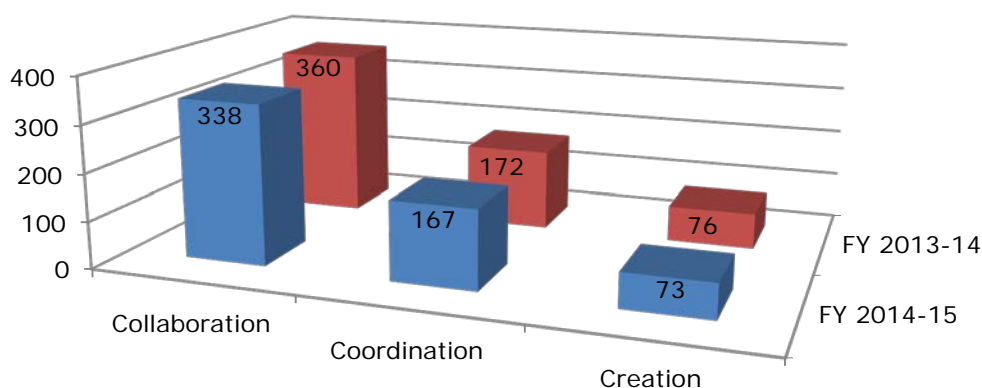
In examining the network connection, all these programs were positioned at centers of the network. According to Ramanadhan et al. (2012), "Networks that are highly centralized can spread information and resources effectively from the influential members" (p. 3). Nonetheless, Krebs (2011) further cautioned, "What really matters is where those connections lead to -- and how they connect the otherwise unconnected!" (¶. 4). For instance, SSEC, SSCDC, and WSN showed one reciprocal link in the network at a *Collaboration* level (Table 43). But these programs played indispensable roles to sustain service deliveries for children with special needs.

In summary, network structure was examined in this section to quantify reciprocal links at *Collaboration*, *Coordination* and *Creation* levels. Program nodes were color-coded to differentiate programs in focus areas of *Child Health*, *Family Functioning*, and *Child Development*. While a dozen programs established strong links for partnership creation since last year (Table 41), "Increases in coordination and cooperation would indicate that agencies are better able to share resources and clients, reduce redundancies and service gaps, and increase efficiency" (Resnick, 2012, p. 1). In addition to these benefits across agencies, special programs have been identified from the partnership building to support traditionally underserved children in remote communities (see Tables 41-43).

### Expansion of Singular Network

Although "reciprocity is a common property of many network" (Garlaschelli, & Loffredo, 2004, p. 4), non-reciprocated links are often remarkably high (e.g. Shulman, 1976; Antonucci and Israel, 1986). Provan et al. (2005) noted that "when links among organizations are not confirmed, this does not necessarily reflect the absence of a link" (p. 607). Singular links could occur through referrals and/or sequential services.

To facilitate partnership classification, Zhu (2014) divided inter-organizational networks into two parts, *sequential relationship* and *alliance partnership*. Programs like EIP could have played a role in both networks. While alliance links provided mutual support for direct services, sequential relationships often occurred during indirect service referrals. Beyond the level of *Co-Existence*, the number of *singular* and *reciprocal* links was aggregated in Figure 28 for 39 programs.

**Figure 28: Total Number of Links above Co-Existence**

In combination, a reciprocal link in Figure 26 contributed two link counts in Figure 28. After its subtraction, the pattern revealed existence of numerous singular ties at *Collaboration*, *Coordination*, and *Creation* levels. Researchers believed that singular ties could play pivotal roles of service delivery under special circumstances (Kogut, 2000; Ruef, 2002). Partly due to EIP discontinuation, the count in Figures 26 and 28 showed a slight decline of network capacity in FY 2014-15.

Among First 5 Kern-funded programs, MVCCP and 2-1-1 Kern County were specialized in center-based referrals. Thus, singular links need to be examined to partition partnerships across *Collaboration*, *Coordination*, and *Creation* levels. Although singular relations did not maintain the symmetry of mutual partnership between service providers, Squartini, Picciolo, Ruzzenenti, and Garlaschelli (2013) maintained that “Correctly filtering out the effects of flux balances or other symmetries can lead to counter-intuitive results” (p. 5).

### 1. MVCCP Referral

MVCCP has been engaging in partnership creation since its inception. After two years of research, development and piloting of case reviews, MVCCP officially launched its services in 2010 with an original mission to coordinate supports for vulnerable children ages 0-5 and reduce the risk of costly, lifelong medical and developmental issues in public health. A key instrument was an acute form that was updated recently to support a “Blue Ribbon” effort for children with the most acute needs in both medical and socio-economic dimensions<sup>40</sup>. Hence, affordability was added to the referral consideration to avoid preventable hospitalizations and emergency room visits.

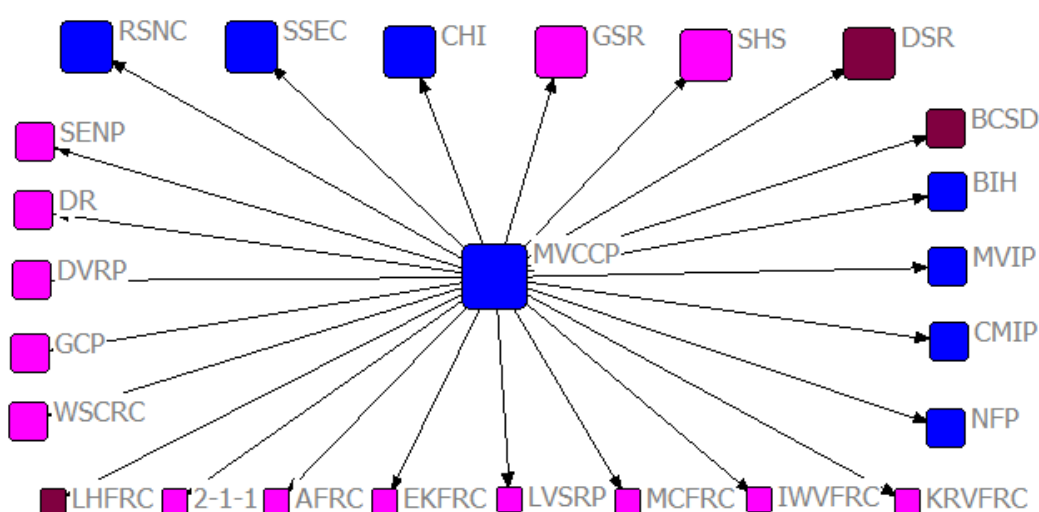
In FY 2014-15, the network was expanded at the *Creation* level to partner with Children’s Health Initiative (CHI), Richardson Special Needs Collaborative (RSNC), and Special Start for Exceptional Children (SSEC). The partnership building shared a common focus on supporting early interventions for children with special needs. Additional partnership creation occurred to support GSR, DSR, and SHS for service delivery in Greenfield, Delano, and Shafter communities where “Most of the children are low-income and are covered by Medi-Cal” (Lucile Packard Foundation for Children’s Health, 2014, p.

<sup>40</sup> <http://www.lpfch.org/cshcn/blog/2014/04/03/grantee-profile-arthur-manalac-kern-county-medically-vulnerable-care>

1). These partners at the *Creation* level were highlighted with large program nodes on top of Figure 29. Different colors were employed to differentiate program affiliations in *Child Health* (Blue), *Family Functioning* (Pink), and *Child Development* (Brown).

Through service referrals, MVCCP brought together more than 40 partner organizations to streamline care for 835 children with special needs. The existing network included 10 partners for service coordination, as indicated by the nodes on both sides of Figure 29). Eight programs were listed at the bottom of Figure 29 for network support at the *Coordination* level. This finding echoed an assertion of Luke and Harris (2007), i.e., “Network analysis is an approach to research that is uniquely suited to describing, exploring, and understanding structural and relational aspects of health” (p. 69).

**Figure 29: Center-Based Referral Links from MVCCP**



Built on the diversified referral network, MVCCP has revised its service referral form this year to address additional factors of poverty, transportation, insurance status, language barrier, and parenting skills pertaining to the support of different partners in the local context<sup>41</sup>. As the entire network bridged across three focus areas, MVCCP has coordinated singular links with different organizations of child protection (e.g., DR, DVRP, GCP), family outreach (i.e., family resource centers), and minority support (e.g., BIH). Because “the more the difference between mutual links, the less the reciprocity” (Squartini, Picciolo, Ruzzenenti, & Garlaschelli, 2013, p. 11), the results in Figure 29 imposed little overlap with reciprocal links from Tables 41-43. Without considering the non-reciprocal links in Figure 29, features of MVCCP referrals could have been overlooked from the network analyses.

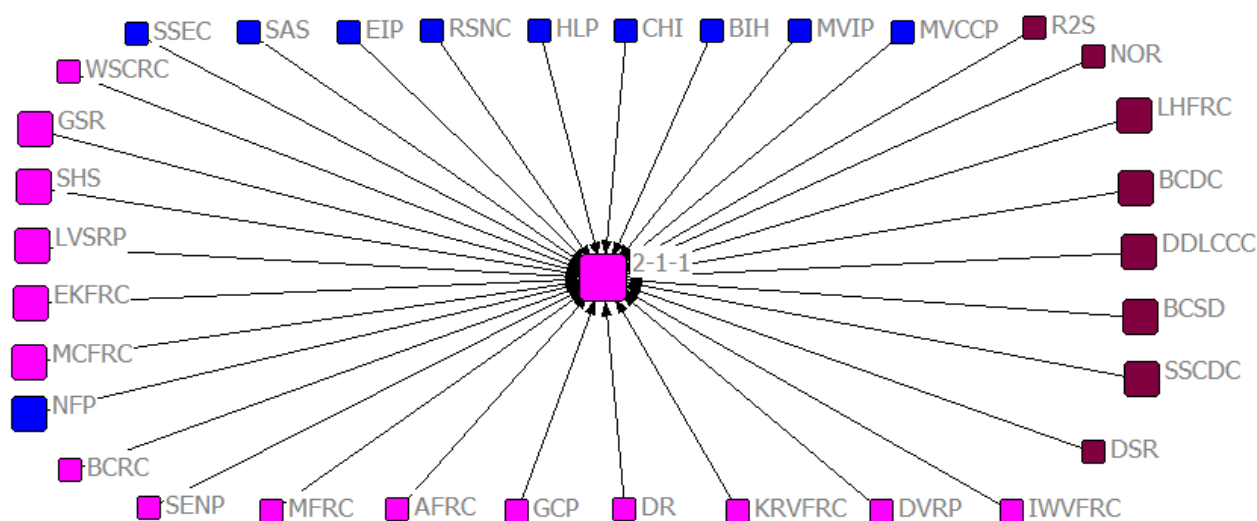
## 2. 2-1-1 Referral

Sponsoring a free, confidential referral helpline and a website, 2-1-1 Kern County connected local residents to health and human services in local communities. Unlike outreaching referrals of MVCCP, 2-1-1 Kern County dealt with incoming inquiries. The foundation of 2-1-1 referrals was linked to an information database from service providers.

<sup>41</sup> <http://www.lpfch.org/sites/default/files/assessment-and-referral-form-sample-from-kern-county.pdf>

Because 2-1-1 Kern County had no authority to re-create the service information, the network has been sustained at the *Collaboration* and/or *Coordination* levels to support information circulation (Figure 30).

**Figure 30: Center-Based Referral Links with 2-1-1 Kern County**



As depicted in Figure 30, programs on both left and right sides were represented by larger nodes to indicate partnership links at the *Coordination* level. Small nodes denoted service providers that partnered with 2-1-1 Kern County at the *Collaboration* level. Among 39 programs funded by First 5 Kern, 87% of them were involved in the 2-1-1 network beyond the level of *Co-Existence*. Diversity of the network building was indicated by program involvement across focus areas of *Child Health* (blue nodes), *Family Functioning* (pink nodes), and *Child Development* (brown nodes). The partnership building has positioned 2-1-1 Kern County as a common harbor of service referrals for the general public. In FY 2014-15, the 2-1-1 database includes over 643 agencies and 1,544 programs. Its Online Resource Directory assisted over 7,277 visitors (Community Action Partnership of Kern, 2014).

Although MVCCP and 2-1-1 Kern County were both located at a network center for service referral, singular links were actively initiated by MVCCP in Figure 29. In contrast, 2-1-1 Kern County served as a receiver of program information and local phone calls, which guided the singular links toward the centroid in Figure 30. The link directions stipulated general steps for service delivery. For MVCCP referrals, the starting point was to assess child condition. Depending on the acute needs, MVCCP created connections to 40 service providers, including 24 programs funded by First 5 Kern (see Figure 29), to improve health and wellness of infants under medically vulnerable conditions. In contrast, 2-1-1 Kern County accumulated a center-based database to respond to inquiries from various stakeholders. The database creation and update originated from service providers. Like MVCCP referrals, the central role of 2-1-1 Kern County only surfaced in a singular network in Figure 30.

In summary, to conform to professional practice, this chapter included both *external literature review* and *internal network analyses* to examine effectiveness of service integration across programs in *Child Health*, *Family Functioning*, and *Child*



*Development.* In the past, identifiable measures from sister commissions were based on network counts. For instance, it was indicated in First 5 Fresno's (2013) annual report that "less than a quarter of all interactions are occurring at the coordination and collaboration level (highest levels of interaction)" (p. 102). While retaining the feature of numeric tracking, this chapter included a description of structural differences between *singular* and *reciprocal* partnerships to address both network referral and mutual program support. Strengths of the network links were rated at *Collaboration*, *Coordination*, and *Creation* levels to track partnership changes between adjacent years.

Built on an axiom that *the whole could be larger than the sum of its parts*, partnership building is expected to enhance systems of care for children ages 0-5 and their families. As was indicated in a local report from cost-effectiveness analyses, "every \$1 of First 5 Kern monies spent produces a \$17.49 return to Kern County's economy" (Henderson, 2013, ¶. 8). Despite economic difficulty in the oil and agriculture industries, service providers leveraged more than \$2.8 million in FY 2014-15 from external organizations to amend shortage of state investment due to tobacco tax decline. As First 5 Kern begins a new funding cycle next year, additional programs will start the initial network building at a *Co-Existing* level. Network analysis results from this year can be tracked to sustain the momentum of partnership building across different service providers.

## Chapter 4: Turning the Curve

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In its Strategic Plan, First 5 Kern (2015b) indicated that “a results-based accountability framework was employed to facilitate turning the curve on those result indicators that most accurately represent the developmental needs of Kern County’s children ages prenatal through five and their families” (p. 3). Within this funding cycle, the same contracts were implemented through annual program funding. Thus, *Turning the Curve* could be represented by continuation of the existing services while absorbing the cost inflation between adjacent years.

Instead of maintaining the status quo, First 5 Kern led service providers to pursue program improvement beyond the current trend. The trend configuration was grounded on comparable data from the Core Data Elements (CDE) survey across 28 programs to monitor indicators of service enhancement between adjacent years. In addition, the Family Stability Rubric (FSR) was employed to collect data on home conditions at 19 program sites in FY 2014-15. Because the same instruments have been employed throughout this funding cycle, value-added assessments are adopted in this chapter to examine improvement of service delivery above the baseline performance from last year. According to Allen (2004), “Value-added assessment generally involves comparing two measurements that establish baseline and final performance” (p. 9).

The mechanism of data tracking was supported by the Institutional Review Board (IRB) of California State University, Bakersfield (CSUB). In sustaining annual protocol renewal, First 5 Kern presented quarterly reports to ensure its compliance to federal, state, and local regulations during the data gathering. Following the same timeline, FSR information was collected on a quarterly basis. Because many programs attained the top level of FSR indicators, the strengthening of family functioning is examined at multiple points prior to demonstration of the ceiling effect. Meanwhile, permanent health records, such as full-term pregnancy and low birth weight, did not change at the individual level. Thus, CDE data are compared between adjacent years to evaluate the improvement of baseline conditions for Kern County children ages 0-5. Alignments have been made at the end of this chapter to link empirical findings to focus areas of *Child Health*, *Family Functioning*, and *Child Development*.

### Improvement of Child Wellbeing Between Adjacent Years

The State Commission stressed that “Evaluation should be conducted in such a way that it provides direct feedback to the County Commission and to the community as a whole” (First 5 California, 2010, p. 17). With a service delimitation in ages 0-5, five-year-olds from last year have reached age 6 this year. As they exit the service coverage from First 5 Kern, newborns are added to the service population. The ongoing population change inevitably impacts an annual comparison of child wellbeing to assess improvement of key CDE indicators across service providers.

Early childhood services have been designed to support child health, protection, and development. Indicators of child health and development included breastfeeding, home reading, and preschool attendance. Child protection was illustrated by additional services in dental care, immunization, and smoke prevention. Improvements of child wellbeing are summarized here to document the impact of First 5 Kern on CDE indicators between adjacent years.

## Prenatal Care

It was projected that “Over the next 25 years, growth in the Kern County could vary widely based on a host of factors” (Lytle, 2015, p. 1), and “the birth rate is the biggest factor” (Ferguson, 2013, ¶. 2). While population growth demanded more services for children of all ages, the birth rate factor attracted more attention on prenatal care for newborns. According to medical professionals, “prenatal care that started in the first trimester was associated with better pregnancy outcome” (Showstack, Budetti, & Minkler, 1984, p. 1003).

Missing timely prenatal care has been a persistent issue in Kern County. Wasson and Goon (2013) reported that “For a variety of reasons, high-risk mothers may delay or avoid prenatal care” (p. 28). In FY 2014-15, “Number of pregnant women referred to prenatal care services” was listed as Result Indicator 1.1.2 in First 5 Kern’s (2015b) Strategic Plan. In the CDE data, the starting dates of prenatal visits were tracked by each program. Table 44 showed a comparison on the percent of families with *timely prenatal care*. The result indicated the rate increase from 78.53% last year to 86.80% this year across 15 programs. This change impacted a total 963 children in this reporting period.

**TABLE 44: INCREASE OF TIMELY PRENATAL CARE BETWEEN TWO ADJACENT YEARS**

Program*	FY 2013-14		FY 2014-15	
	N	Prenatal care @ 1 <sup>st</sup> trimester (%)	N	Prenatal care @ 1 <sup>st</sup> trimester (%)
BAS	47	81	62	90
BCDC	21	48	25	68
BCSD	260	83	252	85
BIH	32	66	39	85
DDLCCC	21	62	37	76
EKFRC	66	77	80	86
IWVFRC	55	73	32	78
LHFRC	38	92	45	96
LVS RP	106	79	57	82
MVIP	71	83	32	94
NOR	182	91	191	94
SFP	16	88	12	100
SHS	63	92	56	93
SSEC	15	73	19	79
WIW	20	90	24	96

\*Program acronyms are listed in Appendix A.

Kern County Network for Children (2014) observed that 75% of pregnant mothers received prenatal care within the first trimester in Kern County. Except for Blanton Child Development Center (BCDC), all programs in Table 44 surpassed the county average in FY 2014-15. BCDC was funded to address childcare needs originated from teenage pregnancy. The record showed that the rate of *timely prenatal care* in BCDC increased from 48% last year to 68% this year.

More importantly, prenatal care needs to be sustained beyond the first trimester. Even for healthy women with low-risk pregnancies, experts recommend *monthly prenatal care visits* at an early stage, increasing the frequency to weekly visits toward the end (Voice for Children, 2011). First 5 Kern funded programs to provide education and service access to pregnant mothers. As a result, the average rate of *monthly prenatal care* increased from 87.31% last year to 95.00% this year across 13 programs (Table 45). This positive change impacted 109 children in Kern County.

**TABLE 45: PROPORTION OF MONTHLY PRENATAL CARE**

Program*	FY 2013-14		FY 2014-15	
	N	Monthly Prenatal Care (%)	N	Monthly Prenatal Care (%)
BAS	47	77	62	90
BCDC	21	95	25	100
DDLCCC	21	90	37	97
DR	760	87	840	90
IWVFRC	55	89	32	97
LVSRR	106	80	57	89
MCFRC	20	90	37	95
NFP	20	100	31	100
NOR	182	91	191	95
SFP	16	94	12	100
SHS	63	92	56	93
SSEC	15	60	19	89
WIW	20	90	24	100

\*Program acronyms are listed in Appendix A.

### Full-Term Pregnancy

Preterm pregnancy often resulted in incomplete organ development. Consequently, "The average first-year medical costs are about 10 times greater for preterm infants than full-term infants" (Wasson & Goon, 2013, p. 28). Hence, resource savings from full-term pregnancy are much needed for early childhood support as state revenue from tobacco tax dwindles down.

**TABLE 46: INCREASE OF FULL-TERM PREGNANCY BETWEEN TWO ADJACENT YEARS**

Program*	FY 2013-14		FY 2014-15	
	N	Full-term pregnancy (%)	N	Full-term pregnancy (%)
BCDC	21	86	25	88
BCRC	29	93	29	97
LHFRC	38	89	45	96
LVSRR	106	77	57	84
MCFRC	20	75	37	84
MVIP	71	17	32	34
SFP	16	88	12	92
SHS	63	87	56	95
SSEC	15	33	19	63
WSN	52	85	59	88

\*Program acronyms are listed in Appendix A.

An outlier should be noted from Table 46 for the Medically Vulnerable Infant Program (MVIP). Although its rate of full-term pregnancy was a much lower rate than other programs, MVIP doubled the full-term pregnancy rate from 17% last year to 34% this year. For other programs, First 5 Kern sponsored services to improve parent health literacy. Table 46 showed the rate of full-term pregnancy increase from 73.00% last year to 82.10% this year across 10 programs. Altogether, programs in Table 46 served 371 children in FY 2014-15.

### Low Birth Weight

Preterm birth was often linked to low birth weight (LBW), which could cause medical complications for children ages 0-5 (Ponzio, Palomino, Puccini, Strufaldi, & Franco, 2013). Recent research further linked LBW to low educational attainment and high prevalence of socio-emotional and behavioral problems in later years (Chen, 2012). In Kern County, Golich (2013) acknowledged that "More babies were born at low birth weight" (p. i). LBW could be caused by many reasons. Scientists indicated that "nutritionally deprived newborns are 'programmed' to eat more because they develop less neurons in the region of the brain that controls food intake".<sup>42</sup> Consequently, Kern County was ranked at sixth and eighth positions across the state for LBW and obesity.<sup>43</sup>

**TABLE 47: DECREASE IN THE PROPORTION OF CHILDREN WITH LOW BIRTH WEIGHT**

Program*	FY 2013-14		FY 2014-15	
	N	Low birth weight (%)	N	Low birth weight (%)
AFRC	72	10	76	9
BAS	47	15	62	11
BCDC	21	19	25	12
BCRC	29	17	29	7
BIH	32	22	39	18
DR	760	11	870	10
DSR	70	16	82	9
KRVFRC	32	6	41	5
LHFRC	38	18	45	9
MCFRC	20	15	37	11
MFRC	65	8	45	7
MVIP	71	80	32	75
SFP	16	0	12	0
SHS	63	14	56	11
SSEC	15	40	19	26
WSCRC	85	9	81	6
WSN	52	11	59	10

\*Program acronyms are listed in Appendix A.

In FY 2014-15, First 5 Kern supported *Systems of Care* to offer a combination of education, prevention, and treatment services for medically vulnerable children. As a result, 17 programs in Table 47 showed reduction of the average LBW rate from 18.29% last year to 13.88% this year. These programs served a total of 1,610 children in FY 2014-15. Similar to the issue of preterm birth, LBW has been a persistent problem to

<sup>42</sup> <http://www.sciencedaily.com/releases/2011/03/110310070311.htm>

<sup>43</sup> <http://www.kidsdata.org>

drain medical resources. Since most communities in Kern County belong to a Medically Underserved Area (MUA), the resource savings played an important role to sustain local support for children ages 0-5.

### Breastfeeding

According to Kirkham, Harris, and Grzybowski (2005), "Breastfeeding is the best feeding method for most infants" (p. 1,308). The positive impact was also extended to children with special needs. Anderson et al. (1999) conducted a meta-analysis and confirmed strong links between breastfeeding and cognitive development among infants with LBW.

**TABLE 48: INCREASE IN BREASTFEEDING RATE BETWEEN TWO ADJACENT YEARS**

Program*	FY 2013-14		FY 2014-15	
	N	Breastfeeding (%)	N	Breastfeeding (%)
AFRC	72	72	76	76
BAS	47	62	62	74
BIH	32	47	39	54
DDLCCC	21	48	37	49
DSR	70	74	82	80
GSR	106	68	111	72
IWVFRC	55	75	32	91
KRVFRC	32	63	41	68
LHFRC	38	66	45	69
LVS RP	106	63	57	74
MFRC	65	72	45	73
NOR	182	70	191	77
SFP	16	69	12	75
SHS	63	70	56	75
SSEC	15	60	19	79
WIW	20	65	24	75
WSCRC	85	42	81	58
WSN	52	69	59	73

\*Program acronyms are listed in Appendix A.

Increasing the breastfeeding rate is listed in the 2015 Children's State Policy Agenda (First 5 California, 2015c). Because breast milk has the most complete form of nutrition for infants (American Academy of Pediatrics, 2012), the U.S. federal government set a national objective in 2011 to have at least 46% of children breastfed in the first three months.<sup>44</sup> In Table 48, all programs surpassed the national objective in FY 2014-15. The average breastfeeding rate across 18 programs increased from 64.17% last year to 71.77% this year. The increased breastfeeding rate benefited 1,069 in Kern County.

### Home Reading

Reading is a critical activity to support early childhood development. First 5 Kern's (2015a) Strategic Plan has identified an indicator of service effectiveness according to the "Number and percentage of families who report reading or telling stories regularly

<sup>44</sup> [www.kidsdata.org/export/pdf?cat=46](http://www.kidsdata.org/export/pdf?cat=46)

to their children” (p. 10). Between the adjacent years in Table 49, 11 programs demonstrated increases in the percent of children who had *two or more home-reading activities* per week. On average, the percent increased from 73.55% last year to 82.73% this year. This progress impacted 851 children in FY 2014-15.

**TABLE 49: PERCENT OF CHILDREN WITH READING ACTIVITIES PER WEEK**

Program*	FY 2013-14		FY 2014-15	
	N	Two or more reading activities per week (%)	N	Two or more reading activities per week (%)
AFRC	107	75	103	86
BCSD	141	74	180	77
BAS	51	72	92	87
BCRC	36	61	50	72
EKFRC	71	56	93	71
IWVFRC	104	84	75	85
RSNC	79	77	68	88
SFP	14	93	15	100
SSEC	40	82	44	91
WSCRC	53	70	76	75
WSN	43	65	55	78

\*Program acronyms are listed in Appendix A.

### Preschool Attendance

Preschool education has been considered a critical component of the K-12 continuum by Every Student Succeeds Act (ESSA). Following the RBA model, First 5 California (2013) reported that “Preschool attendance is correlated with improved kindergarten readiness and kindergarten readiness is associated with long-term achievement” (p. 17). In Table 50, program information has been gathered to track the percent of children *participating in preschool activities* on a regular basis. On average, the rate increased from 28.93% last year to 40.86% this year. This positive change benefited 1,140 children across 13 programs in FY 2014-15.

**TABLE 50: INCREASED SUPPORT FOR CHILDREN TO ATTEND PRESCHOOL**

Program*	FY 2013-14		FY 2014-15	
	N	Attending Activities (%)	N	Attending Activities (%)
BCSD	141	8	180	13
BCRC	36	42	50	66
DSR	70	30	99	54
EKFRC	71	15	93	19
IWVFRC	104	38	75	41
MFRC	93	48	72	57
NOR	215	20	227	22
RSNC	79	77	68	91
SHS	78	22	56	23
SFP	14	35	15	80
SSEC	40	40	44	50
WSCRC	53	15	76	26
WSN	44	14	55	24

\*Program acronyms are listed in Appendix A.



## Dental Care

According to American Academy of Pediatric Dentistry<sup>45</sup>, the first dental visit should occur by a child's first birthday. "Because dental caries are one of the most frequent as well as debilitating and untreated chronic health conditions in children, access to dental care is an important indicator of access to health care" (Inkelas et al., 2003, p. x). First 5 Kern (2015b) designated Result Indicator 1.1.6, "Number of children with an established dental home", to assess its funding impact. Table 51 showed the percent of children *without dental checkups each year* across 17 programs. On average, the percent declined from 35.41% last year to 27.29% this year. A total of 1,298 children benefited from this improvement of dental care access in Kern County.

**TABLE 51: PERCENT OF CHILDREN NEVER HAD DENTAL VISIT**

Program *	FY 2013-14		FY 2014-15	
	N	No Dental Care (%)	N	No Dental Care (%)
AFRC	107	18	103	12
BCSD	212	29	180	24
BAS	82	20	92	15
BCDC	30	43	27	41
BCRC	36	19	50	10
DSR	70	31	99	17
DDLCCC	21	74	50	52
GSR	138	22	132	18
IWVFRC	104	34	75	29
MFRC	93	10	72	4
MVIP	90	67	36	53
NFP	63	33	63	29
RSNC	79	13	68	9
SFP	20	45	15	27
SENP	178	53	105	51
WSCRC	53	34	76	20
WSN	44	57	55	53

\*Program acronyms are listed in Appendix A.

While coordinating services through a partnership network (see Table 42), Kern County Children's Dental Health Network received funding from First 5 Kern to deliver dental care services across Kern County (Figure 13). The results in Table 51 added new evidence to support the positive program impact recapped by Montoya (2013),

Since its inception in 1999, the network has traveled to 2,025 pre-schools and 285 elementary schools in 15 Kern County communities, where hygiene clinicians have provided oral health assessments to more than 30,000 children, administered 29,600 cleanings and fluoride treatments, and place over 15,000 sealants on first time molars (p. 41).

<sup>45</sup> <http://www.aapd.org/assets/2/7/GetItDoneInYearOne.pdf>

## Well-Child Checkup

Well-child checkups were needed due to rapid body growth during ages 0-5. The visits provided opportunities to foster communication between parents and doctors on a variety of health care topics, including safety, nutrition, normal development, and general health care (Medi-Cal Managed Care Division, 2013). In FY 2014-15, 20 programs collaborated on parent education to support well-child checkups. The effort has reduced the percent of children who *never had an annual visit*. Table 52 showed reduction of the no-visit rate from 10.25% last year to 5.65% this year. These programs jointly served 2,495 children.

**TABLE 52: PERCENT OF CHILDREN NEVER HAD ANNUAL WELL-CHILD CHECKUP**

Program*	FY 2013-14		FY 2014-15	
	N	No Checkup (%)	N	No Checkup (%)
BCSD	212	8	179	3
BAS	82	4	92	5
BIH	31	77	30	50
BCDC	30	3	27	0
BCRC	44	5	50	2
DR	988	12	962	11
DSR	70	6	99	1
EKFRC	71	8	93	4
GSR	138	2	132	1
IWVFRC	104	3	73	2
KRVFRC	59	7	59	5
LHFRC	41	5	56	0
LVS RP	126	2	66	1
MFRC	93	5	72	0
NOR	214	6	225	4
RSNC	79	5	67	1
SSCDC	40	28	38	11
SSEC	40	0	44	0
WSCRC	59	12	76	7
WSN	43	7	55	5

\*Program acronyms are listed in Appendix A.

## Immunization

In most cases, well-child visits included an examination of immunization records. In California, some vaccines were required before receiving daycare services. Before becoming preschoolers, children were expected to get all the recommended doses. There have been outbreaks of serious diseases in children who did not get fully immunized (West Texas Family Medicine, 2015). In meeting this critical need, First 5 Kern funded the Children's Mobile Immunization Program of San Joaquin Community Hospital to deliver immunization services throughout Kern County. Table 53 listed the percent of children who completed *all immunizations* across nine programs. The average percent per program increased from 86.56% last year to 91.11% this year. This improvement impacted a total of 671 children in Kern County since the last fiscal year.

**TABLE 53: PERCENT OF CHILDREN WITH SHOTS RECOMMENDED BY A DOCTOR**

Program*	FY 2013-14		FY 2014-15	
	N	All Immunization (%)	N	All Immunization (%)
BCSD	212	92	180	95
BCDC	30	83	27	93
GSR	138	94	132	96
LHFRC	41	98	56	100
NFP	63	95	63	98
SSCDC	40	70	38	76
SSEC	40	98	44	100
WSCRC	53	83	76	91
WSN	44	66	55	71

\*Program acronyms are listed in Appendix A.

### Control of Prenatal Smoking

It has been 50 years since publishing of the 1964 Surgeon General's report that linked smoking to lung cancer and other deadly diseases for the first time (U.S. Department of Health and Human Services, 2014). The local progress seemed very slow. Although California has the second lowest smoking rate (i.e., 13%) in the nation, Kern County's rate is 16%, among the highest in the state (First 5 Kern, 2014).

Still, "From a life course perspective, the concept of early childhood health may begin with prenatal health" (Chen, 2012, p. 2). According to Proposition 10, the public should be educated "on the dangers caused by smoking and other tobacco use by pregnant women to themselves and to infants and young children" (p. 3). As a result of the anti-smoking campaign (e.g., First 5 Kern, 2014), the percent of mothers *smoking during pregnancy* dropped from an average of 16.70% last year to 8.60% this year across 10 programs (Table 54). This positive change was confirmed by CDE data from 558 families this year.

**TABLE 54: PERCENT OF MOTHERS SMOKING DURING PREGNANCY**

Program*	FY 2013-14		FY 2014-15	
	N	Smoke while pregnant (%)	N	Smoke while pregnant (%)
BAS	47	9	62	0
BCDC	21	10	25	8
BCSD	260	7	252	3
BIH	32	9	39	8
DDLCCC	21	33	37	16
IWVFRC	55	24	32	22
MCFRC	20	25	37	8
NFP	20	15	31	3
SSCDC	26	15	24	13
SSEC	15	20	19	5

\*Program acronyms are listed in Appendix A.

### Reduction of Secondhand Smoking

Tobacco use costs Californians more than \$13.29 billion in health care expenses every year (Pan & Hernandez, 2015, p. 3). In particular, Proposition 10 cautioned against

“the dangers of secondhand smoke to all children” (p. 3). As Robles, Vargas, Perry, and Feild (2009) reported, “exposure of children to environmental tobacco smoke (ETS) has been associated with multiple health problems. These problems, including asthma, are particularly critical for children younger than 5 years” (p. 8-9).

**TABLE 55: REDUCTION OF HOME SMOKE EXPOSURE RATE BETWEEN ADJACENT YEARS**

Program*	FY 2013-14		FY 2014-15	
	N	Exposed to smoke (%)	N	Exposed to smoke (%)
AFRC	107	0	103	0
BIH	37	14	34	12
DSR	70	3	99	0
EKFRC	71	14	93	13
LVS RP	126	2	67	0
LHFRC	41	0	56	0
MCFRC	44	9	55	5
MVIP	70	3	36	2
NOR	163	3	227	2
NFP	63	6	63	5
RSNC	72	0	68	0
SHS	64	3	56	0
SSCDC	40	33	38	16
SENP	71	20	105	10
SFP	20	5	15	0
SSEC	40	20	44	16
WSCRC	59	25	62	16
WSN	43	12	55	7

\*Program acronyms are listed in Appendix A.

In this funding cycle, First 5 Kern maintained a “focus on anti-tobacco education programs” (Armstrong, 2012, p. 21). Across the 18 programs in Table 55, the average percent of children under a *home-smoking setting* decreased from 9.56% last year to 5.78% this year. A total of 1,276 children received services from these programs in FY 2014-15. In addition, CDE results from seven programs (AFRC, DSR, LVS RP, LHFRC, RSNC, SHS, and SFP) confirmed *no smoke exposure* for 464 children in two adjacent years.

In summary, First 5 Kern’s funding was invested to control prenatal smoking and home smoke exposure according to an assertion of the State Commission, i.e., “Parental smoking and secondhand smoke exposure have been linked to a range of ailments in babies and young children including, asthma, ear infections, pneumonia, bronchitis, and Sudden Infant Death Syndrome (SIDS)” (First 5 California, 2013, p. 30). The persistent effort has been tracked in adjacent years, and the impact was demonstrated by *ceiling effects* of zero frequency count in seven programs (Table 55).

## Strengthening of Family Functioning in FY 2014-15

Cepeda (2015) reported that “Earlier this year, a study in the Journal of the American Medical Association found that poverty adversely affects structural brain development in children” (p. 1). In part, family poverty was related to the local economy that was hurt by dry weather and low oil prices. Consequently, the four most common assistance requests from 2-1-1 callers were food, clothing, housing, and utility assistance

(Community Action Partnership of Kern, 2014). All these needs were located near the foundation level of Maslow's (1954) hierarchy.

First 5 Kern (2015b) set Objective 2.1 in its Strategic Plan to ensure that "Children and their families will be provided with targeted and/or clinical family support services." (p. 5). In FY 2014-15, household conditions were tracked by multiple indicators to address *food, childcare, transportation, job security, healthcare, and housing* needs in FSR data collection. Cherry (2013) reviewed Maslow's *Hierarchy of Needs* and noted that "Once these lower-level needs have been met, people can move on to the next level of needs, which are for safety and security" (¶. 2). In this section, effectiveness of service delivery is examined between adjacent years to evaluate the strengthening of family functioning across multiple levels of Maslow's (1954) hierarchy.

### Food Needs

In comparison to other ethnic groups, a recent report suggested that African-American and Latino children were more likely to live in poor families (Kern County Network for Children, 2013). In Kern County, the mode of child ethnic distribution was in the Latino category (see Figure 5). Thus, First 5 Kern needs to support families that encountered poverty issues in its service region. As an outcome measure, Moens, Braet, and Soetens (2007) suggested "Observation of family functioning at mealtime" (p. 52). In particular, food supply could be influenced by childrearing practices (Devine, 2005; Vermeir & Verbeke, 2006). For instance, "The birth of a child might also result in the family eating healthier if the goal is to feed their children a proper diet" (Wethington & Johnson-Askew, 2009, p. S75).

**TABLE 56: NUMBER OF FAMILIES WITH UNMET FOOD NEEDS**

Program*	Initial	3 <sup>rd</sup> Month	6 <sup>th</sup> Month
AFRC	2	0	0
BCSD	5	0	0
BCRC	3	0	0
DSR	5	0	0
DVRP	19	2	0
EKFRC	8	1	0
GSR	4	1	0
KRVFRC	7	2	1
LHFRC	2	0	0
RSNC	2	2	1
SHS	0	0	0
SENP	6	1	0
WSCRC	14	2	0
WSN	6	0	0

\*Program acronyms are listed in Appendix A.

In FY 2014-15, FSR data were tracked during the first six months to indicate the number of families with unmet food needs. The disagreement responses against a statement, *food needs were met for all members of household*, were accumulated for 14 programs in Table 56. Based on the results from 661 households, an average number of families with *unmet food needs* was 5.93 per program at the initial stage of program entry. This index dropped to 0.79 in third month and 0.14 in sixth month. Families with children

ages 0-5 received support from First 5 Kern, which allowed them to redirect family resources for improvement of food supplies. By midyear, 13 programs already demonstrated a ceiling effect to show no families with the unmet need (Table 56).

### Unmet Childcare Needs

Childcare needs could be met through center-based and home-based childcare services. While center-based programs delivered childcare services for a group of families, "For many working parents, hiring a caregiver to work in their home is the best solution for their child care and household needs" (Child Care Inc., 2012, p. 1). In either case, program effectiveness is reflected by a decreasing number of households with unmet childcare needs (Table 57).

In FY 2014-15, FSR data tracking occurred in 11 programs to examine whether childcare needs were met in 650 families. Table 57 showed the average number of families *in need of caregivers* dropped from 11.82 at initial program entry to 2.82 per program in the first quarter. By midyear, the average count reduced to 1.27 per program. The change pattern also showed that six of the 11 programs met childcare needs for all families at end of sixth month.

**TABLE 57: NUMBER OF FAMILIES WITH UNMET CHILDCARE NEEDS**

Program*	Initial	3 <sup>rd</sup> Month	6 <sup>th</sup> Month
AFRC	5	1	1
BCSD	17	3	0
DVRP	21	2	0
EKFRC	11	0	0
GSR	5	1	1
GCP	25	9	9
MCFRC	2	1	1
RSNC	8	7	2
SHS	9	2	0
WSCRC	17	5	0
WSN	10	0	0

\*Program acronyms are listed in Appendix A.

### Unmet Transportation Needs for Family Members

Transportation is considered a fundamental need for families with young children, particularly those in rural areas (U.S. Department of Education, 2004). Waller (2005) concurred that "In rural areas, public transportation options are scarce and have limited hours of service" (p. 2). Without transportation, parents and children cannot attend center-based services. Through strategic planning, First 5 Kern has designated a result indicator to enhance transportation support for families with children ages 0-5. Meanwhile, the number of families *with unmet transportation needs* has been tracked quarterly across 10 programs (Table 58).

The average number of families with *unmet transportation needs* dropped from 14.2 upon program entry to 4.40 per program in third month. The number plunged further to 2.20 by midyear. Four of the programs indicated no transportation issue after the first six months. The progress was important in Kern County because a large portion of its

population worked in the agricultural industry throughout rural communities. These 10 programs in Table 58 served 577 families across valley (e.g., BCSD), mountain (e.g., IWVFRC, KRVFRC), and desert (e.g., EKFC) communities.

**TABLE 58: NUMBER OF FAMILIES WITH UNMET TRANSPORTATION NEEDS**

Program*	Initial	3 <sup>rd</sup> Month	6 <sup>th</sup> Month
BCSD	14	4	4
DVRP	37	5	0
EKFC	16	3	0
GSR	5	3	0
GCP	6	2	1
IWVFRC	8	3	1
KRVFRC	13	4	4
LVS RP	13	13	9
WSCRC	11	7	3
WSN	19	0	0

\*Program acronyms are listed in Appendix A.

### Availability of Convenient Childcare

First 5 Kern (2015b) defined Objective 3.2 in its Strategic Plan to ensure that “Special population children (e.g. non-traditional hours and/or children with special needs) will have access to early childhood education and childcare services” (p. 6). In FY 2014-15, FSR data were gathered from 743 families to monitor availability of *convenient childcare providers* for children ages 0-5. Table 59 showed that the shortage of service providers was alleviated by 12 programs this year. For families *in need of convenient childcare*, the average count per program decreased from 15.75 to 4.92 within first three months. By midyear, the number fell to 2.75 per program. Two programs demonstrated zero issues in sixth month.

**TABLE 59: NUMBER OF FAMILIES LACKING CONVENIENT CHILDCARE PROVIDERS**

Program*	Initial	3 <sup>rd</sup> Month	6 <sup>th</sup> Month
AFRC	5	2	1
BCSD	24	8	4
DSR	17	5	3
DVRP	23	4	0
EKFC	21	5	2
GSR	7	2	1
GCP	14	3	2
KRVFRC	13	2	2
LVS RP	14	12	10
RSNC	8	7	4
WSCRC	18	9	4
WSN	25	0	0

\*Program acronyms are listed in Appendix A.

### Job Security

Childcare needs often conflicted with job commitments and professional development opportunities. Consequently, parents or other family members might have



to miss work or school due to lack of childcare, which could reduce job security and cause family instability. Table 60 showed the number of families with an issue of *missing work or school due to childcare*.

**TABLE 60: NUMBER OF FAMILIES MISSED WORK/SCHOOL DUE TO CHILDCARE**

Program*	Initial	3 <sup>rd</sup> Month	6 <sup>th</sup> Month
AFRC	6	3	0
BCSD	21	5	1
BCRC	4	3	0
DSR	15	4	4
DVRP	29	3	0
EKFRC	14	2	0
GSR	7	2	0
IWVFRC	3	0	0
KRVFRC	10	2	2
MCFRC	3	1	1
SHS	8	7	0
WSCRC	17	6	1
WSN	9	0	0

\*Program acronyms are listed in Appendix A.

The quarterly tracking of FSR data indicated that the issue was admitted by an average of 11.23 families per program at the beginning. The number divided to 2.92 and 0.69 by third and sixth months across 13 programs. In FY 2014-15, programs in Table 60 served a total of 582 families across Kern County, and eight of the programs showed no time conflict issue among 361 families by midyear.

In addition, transportation was another barrier for family members to miss work or school (Schroeder & Stefanich, 2001). For low income families in remote communities, transportation support could hinder service access. In FY 2014-15, the number of families was tracked on the issue of *missing work/school due to transportation* (Table 61).

**TABLE 61: NUMBER OF FAMILIES MISSING WORK/SCHOOL DUE TO TRANSPORTATION**

Program*	Initial	3 <sup>rd</sup> Month	6 <sup>th</sup> Month
AFRC	6	2	2
BCSD	17	6	2
BCRC	4	4	0
DSR	10	3	3
DVRP	36	4	0
EKFRC	11	2	1
GSR	5	3	1
IWVFRC	3	2	2
KRVFRC	11	2	2
SHS	6	5	0
WSCRC	12	5	3
WSN	17	0	0

\*Program acronyms are listed in Appendix A.

On average, 11.5 families per program were identified with transportation difficulties upon initial entry. The number shrank to 3.17 and 1.33 by third and sixth months, respectively. With ongoing support from First 5 Kern, the improvement was consistently demonstrated across 12 programs that delivered services for 567 families.

### Unmet Health Insurance Needs

First 5 Kern (2015b) labeled *Objective 1.1* in its Strategic Plan to make sure that “Children will be enrolled in existing health insurance programs” (p. 4). Under the commission leadership, 15 programs tracked 795 families on whether they lacked insurance coverage to see medical doctors. At the beginning of this year, the average number of families *in need of health insurance* was 13.73 per program. The number dipped to 5.73 in third month and 2.87 by end of sixth month. Six programs indicated zero family count by midyear.

**TABLE 62: NUMBER OF FAMILIES LACKING INSURANCE TO SEE DOCTOR**

Program*	Initial	3 <sup>rd</sup> Month	6 <sup>th</sup> Month
BCSD	18	10	10
BCRC	6	4	2
DSR	11	3	3
DVRP	24	5	0
EKFRC	7	0	0
GSR	10	3	0
GCP	34	9	2
KRVFRC	5	2	1
LVS RP	21	15	10
LHFRC	20	17	9
MCFRC	3	1	1
RSNC	13	7	5
SHS	19	9	0
WSCRC	11	1	0
WSN	4	0	0

\*Program acronyms are listed in Appendix A.

### Unmet Dental or Eye Care Needs

In FY 2014-15, 14 programs received First 5 Kern funding to track the FSR indicator on whether families lacked dental and eye care. Table 63 indicated that the average number of families *in need of dental or eye care* dropped from 18.14 upon initial program entry to 7.79 per program in first quarter. By midyear, the average family count reduced to 3.29 per program. The trends also showed zero frequency counts for four programs at end of sixth month. The consistent improvement impacted a total of 708 families that received services from these programs in Table 63.

**TABLE 63: NUMBER OF FAMILIES LACKING DENTAL AND EYE CARE**

<b>Program*</b>	<b>Initial</b>	<b>3<sup>rd</sup> Month</b>	<b>6<sup>th</sup> Month</b>
BCRC	7	5	1
DSR	16	6	2
DVRP	30	10	0
EKFRC	20	6	2
GSR	11	5	0
GCP	43	10	3
IWVFRC	7	2	1
KRVFRC	13	6	4
LVSRC	20	20	11
LHFRC	18	13	10
RSNC	17	11	11
SHS	19	11	0
WSCRC	16	4	1
WSN	17	0	0

\*Program acronyms are listed in Appendix A.

### Unsafe Housing

Similar to last year, the number of families living in unsafe houses decreased across 13 programs. The average number of families per program dropped from 8.85 upon program entry to 1.08 in third month. The number was reduced to 0.38 by midyear. Ten programs reported no house safety issue at end of sixth month. Programs in Table 64 served a total of 696 families across Kern County.

**TABLE 64: NUMBER OF FAMILIES LIVING IN UNSAFE HOUSES**

<b>Program*</b>	<b>Initial</b>	<b>3<sup>rd</sup> Month</b>	<b>6<sup>th</sup> Month</b>
BCSD	3	3	2
BCRC	2	1	0
DSR	6	1	0
DVRP	69	2	0
EKFRC	5	0	0
GSR	3	0	0
GCP	2	1	0
IWVFRC	2	1	1
KRVFRC	2	2	0
MCFRC	1	0	0
SHS	0	0	0
WSCRC	10	3	2
WSN	10	0	0

\*Program acronyms are listed in Appendix A.

Golich (2013) acknowledged, "Housing affordability in Kern County is increasingly more difficult and more families are accessing safety net food programs" (p. i). Food supply, childcare, transportation, and housing conditions also hinged on job security to provide the monetary resources. FSR results in this section demonstrated improvement of family functioning across these stability indicators in FY 2014-15.

In summary, value-added assessments have been conducted on CDE and FSR data to examine the improvement of service outcomes through result tracking. In comparison to last year, the positive impact of First 5 Kern funding is revealed by CDE results on 12 fronts in FY 2014-15:

1. The rate of **prenatal care** in the first trimester was raised from 78.53% last year to 86.80% this year to impact 963 children in 15 programs (Table 44);
2. The rate of **monthly prenatal care** increased from 87.31% last year to 95.00% this year across 13 programs that supported 109 children (Table 45);
3. An increase in the percent of **full-term pregnancy** occurred from 73.00% last year to 82.10% this year in 10 programs that served 371 children (Table 46);
4. The proportion of children with **low birth weight** dropped from 18.29% last year to 13.88% this year among 17 programs that extended services for a total of 1,610 children (Table 47);
5. More mothers provided **breastfeeding**, and the rate increase occurred from 64.17% last year to 71.77% this year across 18 programs that supported a total of 1,069 children (Table 48);
6. The rate of parents *maintaining two or more reading activities with children each week* increased from 73.55% last year to 82.73% this year in 11 programs that assisted 851 children (Table 49);
7. The rate of children **attending preschool events** increased from 28.93% last year to 40.86% this year in 13 programs that served 1,140 children this year (Table 50);
8. The proportion of children who **never had a dental visit** dropped from 35.41% to 27.29% across 17 programs (Table 51);
9. The percent of children who **did not have an annual health checkup** decreased from 10.25% to 5.65% among 20 programs (Table 52);
10. Nine programs demonstrated an increase in the percent of children with **all immunizations** from 86.56% last year to 91.11% this year (Table 53);
11. The percent of mothers **smoking during pregnancy** dropped from 16.70% to 8.60% across 10 programs (Table 54);
12. The rate of **secondhand smoke exposure at home** declined from 9.56% to 5.78% for 1,276 children in 18 programs (Table 55).

While the CDE findings represented annual summative results, FSR data indicate formative outcomes between program entry and midyear to avoid ceiling effects:

1. The number of families with **unmet food needs** dropped from 83 to 2 in 14 programs (Table 56);
2. The number of families with **unmet childcare needs** plunged from 130 to 14 throughout 11 programs (Table 57);
3. The number of families with **unmet transportation needs** decreased from 142 to 22 across 10 programs (Table 58);
4. The number of families **lacking convenient childcare providers** decreased from 189 to 33 among 12 programs (Table 59);
5. The number of families with members who **missed work or school due to childcare** fell from 146 to 9 across 13 programs (Table 60);
6. The number of families with members who **missed work or school due to transportation** plunged from 138 to 16 in 12 programs (Table 61);

7. The number of families **lacking health insurance coverage** dropped from 206 to 43 throughout 15 programs (Table 62);
8. The number of families with **unmet dental or eye care needs** declined from 254 to 46 in 14 programs (Table 63);
9. The number of families **living in unsafe houses** decreased from 115 to 5 across 13 programs (Table 64).

Following the model of Results-Based Accountability, *Turning the Curve* is a key concept for “Defining success as doing better than the current trend or trajectory for a measure” (Lee, 2013, p. 10). Due to economic inflation, population growth, and minimum wage increase, effort on *Turning the Curve* was expected for First 5 Kern and its service providers to maintain stability of early childhood support in Kern County. In addition, CDE and FSR indicators confirmed ongoing service improvements on multiple fronts of *Child Health* (see Tables 44-48, 51-55, 62, 63), *Family Functioning* (see Tables 56-61, 64), and *Child Development* (see Tables 49, 50).

## Chapter 5: Conclusions and Future Directions

Consistent with the Results-Based Accountability (RBA) framework, three-fold questions have been addressed in this report: (1) How much has been done? (2) How well did the programs perform? (3) Were children ages 0-5 better off in Kern County? Regarding the first question, descriptive data were aggregated in Chapters 1 and 2 to indicate service deliveries at both commission and program levels. For the second question, assessment data have been gathered on various outcome measures, such as AAPI-2, ASQ-3, ASQ-SE, BCBH, CASB, DRDP-Access, DRDP-IT, DRDP-PS, ECBI, ISQ, NCFAS-G, NSCS, SRAS, and SESBIR, to evaluate program effectiveness (Chapter 2) and service integration (Chapter 3). The third question was examined through value-added assessments to track the results of First 5 Kern support for local children and their families between adjacent years (Chapter 4). In combination, this report conformed to the *Statewide Evaluation Framework* (First 5 California, 2005) to document the return of Proposition 10 investment in local communities.

To strengthen utility of this annual report, Chapter 5 begins with highlights of three programs that are featured in the *Commission's Report to the State* in FY 2014-15. In addition, past recommendations are reviewed to assess ongoing progress. Future directions are discussed in the *New Recommendation* section to sustain program improvement next year.

### Recap of the Story Telling in Each Focus Area

In clarifying the Results-Based Accountability (RBA) model, Hayes (2002) indicated that another step beyond *turning the curve* was to tell the “*story behind the curve*” (p. 15). This year First 5 Kern selected three programs to illustrate stories of service improvement in *Child Health*, *Family Functioning*, and *Child Development*. The program highlight is mandatory because “county commissions are required to report annual expenditure and service data on their programs to First 5 California” (First 5 California, 2013, p. 33).

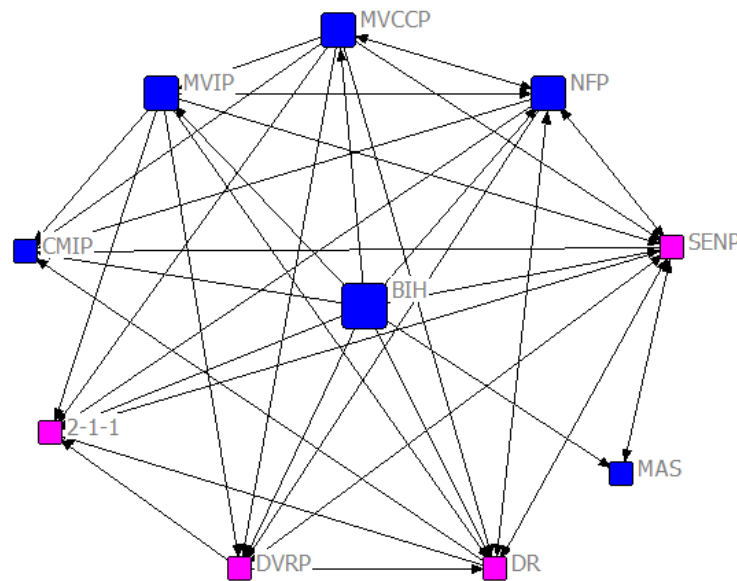
Based on service outcomes across programs, First 5 Kern identified three service providers to exemplify its funding impact in different domains. In *Child Health*, Black Infant Health (BIH) was highlighted for serving African-American women and infants in local communities. In *Family Functioning*, Greenfield School Readiness (GSR) program delivered family support services through case management, parent education, health screenings, and referrals. In *Child Development*, Wind in the Willows (WIW) Preschool was selected for providing education services near the county border. Compelling evidence is examined in this section to recap stories of service delivery and partnership building this year.

#### Black Infant Health

While most programs in *Child Health* delivered countywide services, BIH served four out of the five supervisorial districts that had the largest African-American child population in Kern County. In FY 2014-15, BIH initiated partnership networking with nine service providers, five in *Child Health* (blue nodes) and four in *Family Functioning* (pink nodes) (see Figure 31). Because of its focus on newborns, stronger links have been established with infant health programs, such as MVCCP, MVIP, and NFP (see the larger

nodes) at a *Coordination* level. BIH also *collaborated* with Make a Splash (MAS) to offer water safety education for parents. Meanwhile, child protection services were supported by BIH, DVRP, and DR against child abuse. The BIH information was employed by 2-1-1 Kern County for service referral. BIH partnered with SENP on service delivery in southeast Bakersfield communities. All circumferential nodes in Figure 31 were connected by BIH, which demonstrated BIH efforts in the network building.

**Figure 31: BIH Initiated Network Beyond the Co-Existing Level**

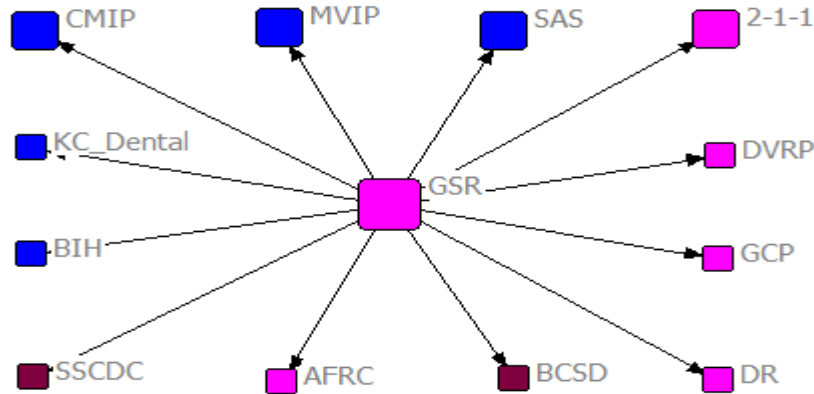


In FY 2014-15, BIH ensured completion of all required immunizations for 95 children. Forty-nine children received developmental assessments. Age-specific screening showed performance of 46 infants significantly above the corresponding thresholds in *Communication*, *Gross Motor*, *Fine Motor*, *Problem Solving*, and *Personal-Social* domains. Group intervention services were provided to case-manage 100 women for smoking cessation and against fetal alcohol abuse. As a result, BIH raised the rate of timely prenatal care from 66% to 85%, reduced the proportion of children with low birth weight from 22% to 18%, increased the breastfeeding rate from 47% to 54%, and lowered the percent of children with no annual health checkup from 77% to 50%.

### Greenfield School Readiness Program

In a grant proposal for this funding cycle, GSR indicated dual foci on *Family Functioning* and *Service Integration*. The partnership building involved six programs in *Family Functioning*, four programs in *Child Health*, and two programs in *Child Development* (Figure 32). The one-mode network showed that GSR coordinated program supports across *Child Health* (blue nodes), *Family Functioning* (pink nodes), and *Child Development* (brown nodes). The network not only included programs of immunization service (CMIP), dental care (KC\_Dental) and health insurance enrollment (SAS), but also extended protection for children with special needs (DR, DVRP, GCP, MVIP, SSCDC). Collaborations concurrently occurred between GSR and nearby FRCs at Arvin and BCSD. The GSR information was disseminated by 2-1-1 Kern County to facilitate its service referral and coordination (Figure 32).



**Figure 32: One-Mode Network Involving GSR Beyond Program Co-Existence**

In FY 2014-15, compelling outcomes were demonstrated by significant improvement of parenting knowledge and skills among 49 parents/guardians. The corresponding effect sizes were 1.44 and 1.01, indicating strong practical impact according to Cohen's (1988) 0.8 criterion. In addition, the improved family functioning extended its significant impact in *Communication*, *Gross Motor*, *Fine Motor*, *Problem Solving*, and *Personal-Social* domains of the ASQ-3. GSR also offered a Summer Bridge program to enhance cognitive skills of preschool children for kindergarten transition.

### Wind in the Willows Preschool

WIW operated a daycare center for 30 preschoolers in Boron, a hinterland community of less than 2,300 populations on a western edge of the Mojave Desert. Despite its 85-mile distance from Bakersfield, WIW collaborated with KC\_Dental to coordinate dental cleaning services for preschoolers. In addition, WIW organized center-based learning activities for 41 children. Through implementation of an age-appropriate curriculum, preschoolers demonstrated significant improvements in six domains: (1) *Self and Social Development*, (2) *Language and Literacy Development*, (3) *Cognitive Development*, (4) *Mathematical Development*, (5) *Physical Development*, and (6) *Health*. A strong practical impact was confirmed by large effect sizes from the DRDP-PS assessment.

In summary, BIH, GSR, and WIW were actively engaged in service improvement and network building in local communities. BIH and WIW program outreach also filled service gaps for minority children and/or children in remote communities. Based on the consistent findings from previous chapters and program highlights in this section, First 5 Kern has funded effective programs in *Child Health*, *Family Functioning*, and *Child Development* to support *Systems of Care* for children ages 0-5 and their families in Kern County.

### Past Recommendations Revisited

In the last annual report, three recommendations were made to sustain ongoing improvements of First 5 Kern service:

1. Allocate program funding based on (1) the past track records from service providers and (2) future community needs in First 5 Kern's Strategic Plan;
2. Exercise local creativity and incorporate new indicators that are more pertinent to the improvement of service delivery in Kern County;
3. Maintain visibility of First 5 Kern through extensive dissemination of program findings.

Through a *turning the curve* process, the Commission is expected to fund effective programs to address local community needs. In FY 2014-15, First 5 Kern hosted an annual strategic planning session to review what has been accomplished and examine future challenges in the next funding cycle. Meanwhile, TAC initiated discussions on viable approaches to improving local services through partnership building. During the 2015-20 *Request for Proposals* process, previously funded programs were required to provide performance records and justify their service plan to meet the future needs. Hence, First 5 Kern has addressed the first recommendation from last year.

In response to Recommendation 2, First 5 Kern created 10 new indicators in its Strategic Plan to track service improvements:

- 1.1.3. Number of children who were successfully enrolled into a health insurance program and received well-child check-ups.
- 1.1.7. Number of families referred to a local enrollment agency for health insurance application assistance.
- 1.5.1. Number of children who received nutrition and/or fitness education
- 1.5.2. Number of parents/guardians who received nutrition and/or fitness education
- 1.6.4. Number of parent/guardians who receive First Aid/Cardiopulmonary Resuscitation (CPR) education
- 2.1.7. Number of children who received general case management services, including home visits.
- 2.1.8. Number of children who received intensive case management services, including home visits.
- 2.1.9. Number of children who received services to prevent domestic violence, child abuse and/or neglect.
- 2.4.2. Number of parents/guardians who received transportation services.
- 4.3.3. Number of articulation meetings held to establish or review a standardized transition plan for incoming kindergartners.

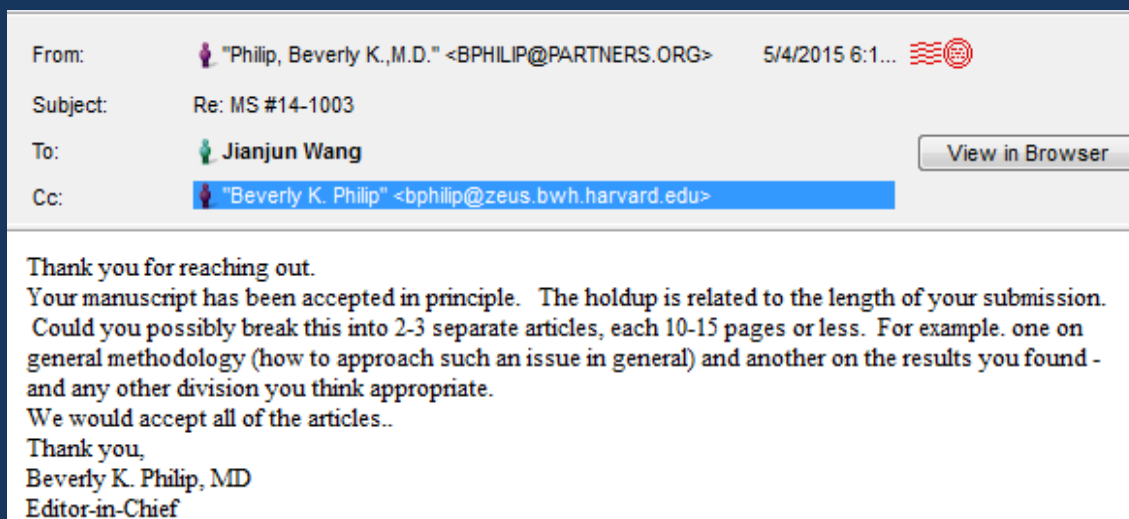
These changes are pertinent to service deliveries in *Child Health* (Objectives 1.1.3, 1.1.7, 1.5.1, 1.5.2, 1.6.4), *Family Functioning* (Objectives 2.1.7, 2.1.8, 2.1.9, 2.4.2), and *Systems of Care* (Objective 4.3.3). Therefore, the second recommendation has been adopted by First 5 Kern to facilitate clarification of the expected service outcomes for the next funding cycle.

The third recommendation was grounded on a requirement of Proposition 10 to "inform involved professionals and the general public about programs that focus on early childhood development" (p. 3). To enhance program visibility in the general public, the evaluation team presented First 5 Kern findings at commission meetings in October, 2014 and February, 2015. On June 23, 2015, First 5 Kern sent representatives to disseminate program outcomes at a Taft School Board Meeting. Program updates were presented at

quarterly meetings at the Institutional Review Board at California State University, Bakersfield. First 5 Kern also published quarterly newsletters to disseminate information for service providers and community partners.

In FY 2014-15, First 5 Kern maintained its presence in professional organizations. The local program findings were reported at the 2014 annual meeting of the American Public Health Association (Navarro, Maier, Ortiz, & Wang, 2014) and the 2015 annual meeting of the American Educational Research Association (Wang, Ortiz, Maier, & Navarro, 2015). In addition, past annual evaluation reports were peer-reviewed and accepted for dissemination by the Education Resource Information Center (ERIC) of U.S. Department of Education (ERIC Document Reproduction No. *ED553754*, *ED545555*, *ED539378*, & *ED538687*). The evaluation team also completed a manuscript for publication in a nationally refereed journal. In response, Professor Beverly Philips of Harvard University stated that "Your manuscript has been accepted in principle" (Exhibit 3). The manuscript revision has resulted in two articles in press in *Ambulatory Survey*.

### Exhibit 3: E-Mail Confirmation on Article Status



In combination, First 5 Kern is dedicated to sharing program findings at the local level through community updates, conference presentations, and newsletter distributions. First 5 Kern also kept its visibility in professional organizations, as documented by conference papers, ERIC reports, and journal publications. Therefore, First 5 Kern has addressed the third recommendation from last year.

In summary, all three recommendations were derived to sustain the impact of First 5 Kern funding. While the first two recommendations were designed to strengthen the Results-Based Accountability, the third recommendation was adduced to strengthen result disseminations in the general public and professional communities. The ongoing progress has confirmed an assertion that "First 5 Kern has built a strong reputation in the community as an expert and advocate for children from prenatal through age five and their families" (First 5 Kern, 2015b, p. 2).

## New Recommendations

Since passage of Proposition 10 in 1998, substantial changes occurred in early childhood support. In *Child Education*, "California had an accountability system prior to 'No Child Left Behind' [NCLB] and we have continued with this system since its inception in 1998" (Baker & Bahr, 2015, ¶. 1). Thus, the NCLB-type accountability and Proposition 10 concurrently impacted early childhood services in California since the late 1990s. Attempt was made under NCLB to support development of academic skills in preschools (Stipek, 2006). In the near future, Every Student Succeeds Act (ESSA) will replace NCLB to impact programs of early childhood service across the nation.

In *Child Health*, the Patient Protection and Affordable Care Act (PPACA) was signed into law by President Barack Obama in 2010 to increase the quality and affordability of health insurance, expand public and private healthcare coverage, and reduce medical service cost. Pear (2012) claimed PPACA as the most significant regulatory overhaul of the U.S. healthcare system since the creation of Medicare and Medicaid in 1965.

In this context, First 5 Kern will sponsor 41 programs in the next funding cycle. Following an intention of Proposition 10 to fill critical gaps in the existing system, all service providers are expected to embrace the new policy impact in both *Child Education* and *Child Health*. To enhance the mutual support among service providers, First 5 Kern needs to facilitate dissemination of program information at beginning of the next funding cycle. Thus, **the first recommendation is to organize a contractor gathering to display service capacity of First 5 Kern-funded programs**. The network building not only facilitates internal service integration, but also supports the information exchange with the general public. Similar gatherings were organized successfully in FY 2011-12 and FY 2012-13. Thus, feasibility of this recommendation has been demonstrated by past practice.

**TABLE 65: COUNTS OF SERVICE BARRIERS BETWEEN ADJACENT YEARS**

Barrier	FY 2013-14		FY 2014-15	
	Initial	12 <sup>th</sup> Month	Initial	12 <sup>th</sup> Month
1. Childcare Support	23	2	29	3
2. Availability of Healthcare Provider	8	3	16	2
3. Availability of Appropriate Doctor	9	1	13	2
4. Copayment	12	1	7	0
5. Doctor for Medi-Cal	31	8	36	14
6. Health Insurance	37	1	25	0
7. Immigration Status	5	0	0	0
8. Language	24	9	23	8
9. Transportation	215	38	157	16

In preparing for the new funding cycle, First 5 Kern has transferred its data management platform from the Grant Evaluation and Management Solution (GEMS) system to the Persimmony Data Solutions (PDS) system. Because PDS has been contracted by the majority of First 5 county commissions, **the second recommendation is to expand the opportunity of data comparison between First 5 Kern and other county commissions to reduce service barriers for children ages 0-5 and their families**. In Table 65, service barriers were identified by the CDE data on nine

dimensions. Although the results in Kern County showed a consistent drop of service barriers between entry and exit points in adjacent years, external comparisons across county commissions may help identify generalizable approaches to benefit children ages 0-5 and their families across the state.

In FY 2014-15, First 5 Kern maintained a frugal budget in the state trust fund administration. Although “eight percent (8%) of the annual fund allocation” was designated for administrative and staff support (Ord. G-6637, 1999), First 5 Kern kept the administrative spending under 6.95% this year. In promoting direct services, First 5 Association of California (2015b) suggested Cost-Benefit Analysis (CBA) as an approach to “control the investment function” (p. 23). Accordingly, **the third recommendation is to conduct a CBA project to demonstrate the public savings from the services of First 5 Kern and its funded programs.**

This recommendation is also grounded on the past CBA reports released by First 5 Kern in 2008 and 2011 (Corporation for Standards & Outcomes, 2008; VanGilder & Berri, 2011a, b, c, d). While the first CBA report included an examination of new job creation and tobacco-sale reduction (Corporation for Standards & Outcomes, 2008), the second set of CBA reports were delimited to analyses of five specific programs in *Child Health* (CHI, CMIP, KC\_Dental, NFP, MVIP) (see VanGilder & Berri, 2011a, b, c, d). In the new funding cycle, additional approaches may be taken in the CBA project to incorporate more profound variables that are closely related to direct service deliveries in *Child Health*, *Family Functioning*, and *Child Development*.

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## **Appendix A**

### **Index of Program Acronyms**

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**Appendix B**

**Technical Advisory Committee served in FY 2014-15**

**Sam Aunai (Commissioner)**

Dean of Instruction, Porterville College

**Tammy Burns**

Coordinator, Early Childhood Council of Kern - Kern County Superintendent of Schools

**Deanna Cloud**

Administrator, Kern County Children's System of Care

**Jesus Cordova**

Coordinator, Shafter Healthy Start - Richland School District

**Tom Corson**

Executive Director, Kern County Network for Children

**Michelle Curioso**

Director of Nursing and MCAH, County of Kern Public Health Services

**Jan Hefner**

Director, Children's Health Initiative of Kern County - Mercy Foundation - Bakersfield

**Antoinette Jones-Reed**

Assistant Director, Child Protective Services, Kern County Department of Human Services

**Sandy Koenig**

Coordinator, West Side Community Resource Center - Taft City School District

**Bill Phelps**

Chief of Programs, Clinica Sierra Vista

**Larry J. Rhoades (Commissioner)**

Retired Kern County Administrator

**Rick Robles (Chair and Commissioner)**

Retired Kern County Administrator

**Al Sandrini**

Retired School District Superintendent

**Jennifer Sill, LMFT**

Department of Mental Health

**Meserat Springer, PHN**

Public Health Nurse, County of Kern Public Health Services

**William Walker**

Director, Department of Mental Health

**Cindy Wasson**

Retired Kern County Nurse and Community Advocate

**Debbie Wood**

Coordinator, Supporting Parents & Children for School Readiness - Bakersfield City School District